Electrical & Computer Engineering Department
Industrial Associates Board Meeting
Friday, April 2, 2004

Members Present: Tim Ash, Duncan Halstead, Ed Hulls, Susan Hunter, Molly Johnson, Alan Meyer, John Nichols, James Stewart, Tom Williams

Faculty and Staff Present: Edwin Chong, Andrea Leland, Tony Maciejewski, Carmen Menoni, Louis Scharf, H.J. Siegel

1. Ed Hulls, IAB President, opened the meeting, welcomed members, explained the meeting theme, reviewed the agenda, and asked everyone to introduce themselves.

2. Tony Maciejewski, ECE Department Head, gave a department update and led the first breakout discussion.

Tony’s presentation included:
• Department Update:
  a. Andrea Leland joined the department in January to focus on alumni and industry relations, development, and marketing.
  b. Enrollments still up: Undergraduate – 360; Graduate – 174
  c. CSU signed collaborative Ph.D. Program agreement with the University of Puerto Rico Mayaguez Campus
  d. Three Colorado Institute of Technology (CIT) grants awarded:
     i. $2M equipment gift for COGrid initiative
     ii. $250K grant to study robustness in computing systems
     iii. $221K grant for Integrative K-12 College Training Program for Computer and Semiconductor Industry in the Rocky Mountain Region
  e. Enrollment trends from 1990 to present
  f. Proposal activity in terms of dollars from 1993 to present
  g. Research expenditures from 1993 to present
  h. Overview of funding challenge for Colorado higher education, including information regarding direct impact on CSU revenue to support academic programs.
• Breakout Session:

  Topic: Focusing on students at the high school level, how can we collaborate to increase involvement in engineering, math, and science?
  a. Over the last ten years there has been a decline in student interest in engineering
  b. Forecasters predict a shortage of engineers by 2010
  c. The rest of the world recognizes the value of engineering
  d. One possible solution: The Infinity Project

3. Ed Hulls facilitated the group breakout session and breakout review.
ACTION ITEMS:

- Members of IAB (James Stewart and Alan Meyer volunteered) and ECE (Tony Maciejewski and Tom Chen) will initiate a meeting with the superintendent of the Poudre School District to discuss the possibility of increasing engineering education in the curriculum. Andrea Leland will coordinate this meeting.

- Tony Maciejewski will begin sharing engineering statistics from his presentation with current and new ECE students.

- ECE Department will think about incorporating some sort of K-12 outreach component into the existing senior design program. H.J. Siegel suggested developing a way to reward students who participate (i.e. personalized plaques).

- Explore Infinity Project further - Andrea Leland to send additional information about the program to the IAB.

- ECE Department will consider the possibility of a high school internship program at CSU.

- ECE will begin promoting Engineering Days in local schools.

- ECE will consider reaching out to local high school counselors as a way to further promote engineering education.

- ECE and IAB will pitch a story idea to the local press regarding the future scarcity of U.S. engineers and the impact on our society’s quality of life. Tim Ash volunteered to write the first draft. Andrea Leland will work with Tim on messaging and handle media relations.

4. Duncan Halstead presented an overview of LSI Logic.

5. Ed Hulls conducted IAB elections. The board unanimously voted Susan Hunter as the new president of the IAB. No volunteers for the vice president position, so that election has been postponed. Susan will call for another vote in the fall.

6. Lunch was served and the ECE students joined the meeting.

7. Tony Maciejewski presented changes to the 2004 curriculum and led the second breakout session. Participants split into two groups to discuss these curriculum changes and brainstorm ideas for improving the current program.

   • Breakout Session:
     - Topic: Working in technical focus groups, discuss how we can work together to improve the student’s educational experience.

8. Susan Hunter facilitated the breakout review.
• Results from Group 1:
  a. Group agrees with curriculum changes
  b. Consider teaching LabView instead of HPV
  c. Keep Physics
  d. Introduce OrCad into senior design – might apply to PC board layout
  e. Host a Career Advising Night after the CSU Career Fair. IAB members could share their industry knowledge and offer students advice about various career paths.
  f. Keep class field trips to local companies.
• Results from Group 2:
  a. Keep Physics first semester; decouple lab or cut 2nd semester
  b. Incorporate technical writing and requirements documentation into senior design
  c. Ask IAB members to serve as advisors and mentors for senior design projects to provide “real-world” critiques; the IAB member would play the role of the customer.

ACTION ITEMS:
• Plan a “Student Advising Night” in conjunction with CSU’s Career Fair. Andrea Leland will lead this effort.
• Continue class field trips, but expand to include graduate students as well.
• Increase IAB’s involvement in senior design by sending the board a list of all student projects early in the year. This gives board members plenty of time to review the list and determine whether they would be willing to serve as a customer for one of the projects.

9. Andrea Leland presented IAB marketing initiatives – which tie directly to the IAB mission statement – and encouraged members to contact her with their ideas, updates, and suggestions.

10. Tony Maciejewski wrapped up the meeting and thanked everyone for their participation.

The next IAB meeting will be scheduled at a later date.