Topics

• Advisory Board Process
• Feedback on Undergraduate Program
  – Objectives
  – Changes
  – Budget Challenges
  – Enrollment Challenges
  – Student Feedback
• Feedback on Graduate Program
• Overall Impressions
Advisory Board Process

• Recommendations
  – New Advisory Board members at this meeting provided new perspectives and brought additional energy to the meeting and board actions. Keep using staggered term limits to provide the opportunity for new members. Need to assure continuity and no more than 1/3 turnover for any given meeting. Department chair should decide Board membership.
  – Have government, large aerospace company, and local company representation on the board. Chair should be local.
  – At this meeting, we created 3 Faculty / Advisory Board subcommittees to address key improvements
    • Internships (set up web site outlining internship opportunities and bring prospective employers in to CSE and/or AEM in the Fall semester to communicate the value of internships) – all board members to provide link to their web site for internships and list of AEM alumni in their organizations to Professor Leo.
    • Career Planning (involve alumni in coming in to discuss resume content, interview process, and career options across many industries) – all board members will participate
    • Development / Fund Raising (determine ways to increase giving for both scholarships and support to department equipment and facilities needs) – Sanjay Garg and Dave Sippel will participate
Feedback on the Undergraduate Program

• Objectives
  – No issues

• Changes
  – More emphasis for Space side of the curriculum. Consider future faculty hire to increase emphasis on Space.
  – The Board believes the addition of 1 hour courses on computer tools is a great idea. You may want to consider expanding to other special topics such as Introduction to Systems Engineering or Introduction to Networking and Communications. The North Star chapter of INCOSE is a good resource for Systems Engineering short course material.
  – Suggest that the department look at “Freeware” tools such as Python because many elements of the technical community are moving in that direction

• Budget Challenges
  – Concern that there may not be enough resources to continue to recruit and retain top faculty talent
  – Concern that there may not be enough resources to support Lab Equipment in the current budget environment

• Enrollment Challenges
  – Concern over recent reductions in undergraduate enrollment
  – Make sure the reasons are well understood
Feedback on the Undergraduate Program

• Student Feedback
  – Really appreciate the access they have to faculty and willingness of faculty to help them
  – Facilities are very good – building renovation continues to provide significant benefits to all aspects of the program
  – Would like more access to lab facilities for enrichment activities but the students realize that it may be difficult to administer that type of access
  – Order of required classes present challenges for transfer students. There is significant repetition between Mechanics of Flight, Fluid Mechanics, and Aerodynamics
  – Students would appreciate more help from the department in finding internship opportunities, conducting job searches, and finding financial aid opportunities
  – Concern that there are too few TAs resulting in them being overworked and not providing all the desired support to classes. Statics and Dynamics are two examples. Suggest top undergraduate students would be good candidates as TAs for these courses
  – Need to make sure Senior Design project topics support innovative thinking. Specific concern over recent low wing float design project – tended to just re-use existing design
  – Students really appreciate the professors that go the extra mile and provide “real world” examples to emphasize why the theory is important. Several professors were highlighted for this practice
Feedback on the Graduate Program

• Good discussion on student diversity demographics. Board suggests working to increase percentage of women students in the program. Board members will e-mail department chair with suggested ways to make this happen.
• Agree with focus on expanding undergraduate and graduate scholarships
Overall Observations

• Energy level, enthusiasm, overall culture – both student and faculty is fantastic. You are all to be commended in making this happen. KEEP IT UP!
• Facility renovation very impressive – great creativity, innovation, and vision on layout and use of the facility
• Number of student competitions for AEM students is impressive and clearly enriching the academic experience for the students
• Board is very impressed with the long term development and continued expansion of the Aerospace Systems element of AEM
• AEM as a department needs to elevate focus on helping students with career planning, preparation, and job searching. The intent of the new sub-committee is to facilitate alumni involvement to make this happen.
• Board is concerned how reduction in future research funding opportunities might impact the department. Future watch item for the board.
• Board concerned about decreasing enrollment. Would like to discuss AEM analysis done to determine cause and any corrective action at next Board meeting