# Mechanical Engineering Topics for Board of Advocates Meeting October 4, 2013

1:30 p.m.

Professor Dick Campbell (Dr. Jordan in Detroit with senior design students)

## **Meeting Notes**

The following Board members were present: Crawford, Gilman, McBride, McCollum, McErlean, Roberts, Sedate, Sevadjian, Smith, Spencer, Tullis, Wiethorn

The following faculty members were present: Campbell, Wright, McClain, Jack, Snyder

1. Mr. Campbell updated the Board members on the following topics:

## **Departmental news**

- Transitions within the M.E. Department
  - Dr. Steve McClain was tenured and promoted to Associate Professor
  - o Dr. Bob Doty retired
  - o Dr. Deify Law resigned
- New faculty
  - o Dr. Doug Smith joined us as an Associate Professor
  - o Dr. Jordan Raney joined us as an Assistant Professor
  - Mr. Larry Snyder joined us as a Clinical Professor of Innovation and Development
- Growth of program
  - ME program has more than ½ the students in ECS with about 1/3 the faculty
  - Severe limitations on space
  - Separate enrollment standards effective fall 2014. Already discussing raising these standards again for fall 2015.
- Graduate program
  - Is expanding
  - Ph.D. Proposal goes to the Board of Regents on October 17
  - Issues related to teaching with increased enrollments

In addition the recent approval of the PhD proposal by the Graduate Council was announced, and the Endowed L-3 Scholarship was announced.

2. There was a brief review of the ABET accreditation and a mention that we are doing assessments this year for the next visit in 2018. Mr. Campbell also reviewed the planning and discussions that have been occurring regarding engineering using Cashion/Hankamer after the Business School moves out, and the current policies regarding moving to the BRIC.

#### ABET Accreditation visit fall 2012

After our response we did get the full six years re-accreditation (can only publicly say we are accredited)

ABET shortcoming that remained was a concern over space.

3. Mr. Campbell discussed the current work being done on revising 1301/1302. There was also interest in the idea of extending the senior design to a full year, and the Board was generally positive toward this proposal. Mr. Campbell told the Board that when the proposals were complete that the Board would be asked for their comments as well.

## **Curriculum topics**

Would like Board's comments/feedback upon the following items

- Considering changing the freshmen course sequence
- Considering changing the design courses
- Continuing to do some joint senior design projects with the University of Detroit Mercy, Villanova, and University of Dayton. Students from multiple universities work as team members on shared projects
- 4. Mr. Campbell discussed the current enrollment, the new pre-engineering program, and the enrollment management controls starting next Fall 2014 semester, including controls on transfer students.

## **Department Chair's biggest concerns**

- Growth of student numbers has outpaced growth in faculty causing teaching load issues and space issues
- Many changes will occur as we begin our Ph.D. program
- 5. Most of the time was spent discussing two issues:
  - a. How the Board can help with Internships and Senior Design Projects
- Mr. Campbell emphasized the need for sustainable relationships with industry for senior design projects, and that the Board's networking capability could help. The value of internships was also discussed, and several members thought that a tie-in between internships and senior designs projects was valuable in getting new companies to sponsor projects.
  - b. Improving graduates skills

Several Board members mentioned that fundamental business skills were weak. There was considerable interest in the new program management certificate. They would like to see an improvement in writing skills and leadership skills. Mr. Tullis suggested some type of mentorship program connecting ME students with recent graduates. There was discussion and general agreement that this would be worthwhile, but no specific action items were taken.

## Ways the Board can help the Mechanical Engineering Program

• Problems caused by growth and finite resources (faculty and space)

- More industrial sponsorship of senior designOther ways?