

# ACADEMIC PLANNING COUNCIL

October 16, 2017

3:00 p.m. Altgeld 315

## Minutes

Present: Barnhart, Chitwood, Cripe, Daniel, Douglass, Falkoff, Gordon, Hunt, Isabel, Mini, Mogren, Reynolds, Siblik, Torres, Wilkins, and Winkler

Guests: Susan Smith- Projects Coordinator Institutional Effectiveness

Meeting called to order at 3:02 p.m.

### 1. Announcements

- No announcements

### 2. Approval of minutes

- First motion made by Judith Chitwood
- Second motion made by Rebecca Hunt
- Motion approved

### 3. Discussion of subcommittee report:

- **Subcommittee A:**

Judith Chitwood gave an overview of the subcommittee reports

- **Microelectronics Research and Development Lab (MRDL)**

- They provide good training opportunities for many engineering students.
- The MRDL provides critical hands-on experience for students and has served over 500 students primarily in Electrical Engineering in the past 6 years.
- Develops programming for graduate student recruitment and retention.
- Record of external funding and receipt of equipment donations.
- Has there been progress in working with the College of Engineering and Engineering Technology to develop a Ph.D.? This was desired quality improvement and it was noted non-Ph.D. program inhibits external research funding.
  - They do want to incorporate Ph.D. in Electrical Engineering to gain more resources.
- Recommendations:
  - Expand the work on research focused activities.

- Continue efforts in developing collaboration with alumni, sponsors and external corporations to receive funding necessary to support the program.
  - Work with the College and the university entities to better define the role and responsibilities of the MRDL.
  - Examine teaching loads.
- **B.S. and M.S. in Electrical Engineering**
- The department has seen continuous growth in undergraduate enrollment since the last review, increased by 42%
    - Due to such rapid growth, the student-faculty ratio is 31:1.
      - Are there efforts to increase faculty numbers?
      - Can grant money be used towards hiring more faculty?
  - What has the program done to facilitate underrepresented groups of students?
    - From the review dashboard, racial/ethnic diversity is satisfactory while diversity across male and female still remains a gap.
      - There is small female enrollment.
  - **B.S. in Electrical Engineering**
    - There is an increased external demand in the B.S. program, across both new freshman and new transfers.
    - Society of Women Engineers conducts workshops in the suburbs to attract female students.
    - Department has continuous improvement for the program.
    - Job placement is 91%
    - Is there progress with developing online courses?
      - Working on online offering
    - Bringing in external relationships, which is helping their reputation.
    - Recommendations
      - The program does a good job of tracking recent employment percentages. Strive to identify ways to track graduates out to a 5-year benchmark as well as to measure job satisfaction and leadership opportunities.
      - To have student led activities such as study groups or student panels for senior students to mentor junior students for progress towards graduation, pass rate and future job placement.
  - **M.S. in Electrical Engineering**
    - Graduates appear well prepared for the job market and have a high placement rate.

- Substantive funding of grants and contracts from private/public corporations and government agencies. Such funding has helped support graduate assistants and opportunities for experiential learning.
  - Program has effectively brought down the time to completion since 2010.
  - Recommendations
    - Continue to explore opportunities for online courses.
    - Conduct your own survey of alumni and/or employers to better engage effectiveness of the program.
    - Develop advising strategies to centralize the process for retention within the program.
  
- **Subcommittee B:**

Jeanne Isabel gave an overview of the subcommittee report

  - **B.S. and M.S. in Mechanical Engineering**
    - Faculty productivity is being affected due to heavy teaching load. As a result, they do not have much time to put research materials out.
      - A proposal to hire dedicated advisors will help alleviate the faculty workload.
    - Explain why freshman and transfer numbers are slightly down yet enrollment is up.
      - Many students come to NIU with the desire to major in Mechanical Engineering then can't get passed a required math course. therefore their direction may change out of necessity or desire. Some students are advised to seek courses at a community college and return. Because of the reputation of the program, many students do just that.
    - A concern is that the building is not suitable for their enrollments. The program is worried they won't be able to accommodate the growing number of students.
    - Much lower costs compared to other schools.
    - Has ties to about 7,000 manufacturing companies
      - Good for students and graduates.
  - **B.S. in Mechanical Engineering**
    - The program does an exceptional job of utilizing its resources to teach efficiently and effectively. This is evident in its credit hour production over the 2011-2014 period. Alumni perceptions of quality have also significantly increased during that period as well.
    - Alumni have high employment and are making a good income.

- Continue to gain information from alumni/employers of NIU graduates.
  - What are the plans to diversify the student population?
    - With plans to implement a major in biomedical technology, there is a possibility of increased female presence.
- **M.S. in Mechanical Engineering**
  - Faculty members and staff provide strong support for students in the program, as evidenced by the student organization and student internship opportunities.
  - Faculty dedicated to student success with projects and research activities.
  - Discuss the impact of offering a Ph.D. in Mechanical Engineering.
    - The driving force behind this is to move the program in Mechanical Engineering at NIU forward and to remain competitive.
  - Recommendations
    - Utilize feedback from the assessment office to improve measures of student learning outcomes at the graduate level to be differentiated from the B.S. Student Learning Outcomes.
    - Evidence of the number of students involved in the Honors Program and Research Rookies would be valuable for recruitment.

#### **4. Other business**

- No other business

Meeting adjourned at 3:55 p.m.

Respectfully submitted,

Mickey Rodriguez and Crystal Doyle