

**Monthly Faculty Meeting  
Electrical Engineering Department**

**Present:** Roger Dougal, Chair

Mohammad Ali	Krishna Mandal
Andrea Benigni	David Matolak
Charles Brice	Enrico Santi
MVS Chandrashekhar	Guoan Wang
Yinchao Chen	Xiaofeng Wang
Asif Khan	Bin Zhang

**Absent:** Herbert Ginn, Paul Huray, Grigory Simin

**Recorder:** Nat Paterson

The meeting was called to order by Dr. Dougal at 3:30 p.m. in EE Conference Room 3A75 on March 5, 2015.

**1. Announcements –**

- Minutes from last month were electronically approved
- Undergraduate Group Advising Session will be held by Dr. Simin on Monday March 16, 2015 at 4:30 PM in 3D05 to describe common opportunities for students.
  - GSSM “Accelerated” Summer Experience – a volunteer (paid) is needed to teach a two-week class on renewable energy in collaboration with Dr. Lauterbach. Dr. Benigni did this last year. Instructor could be a graduate student or a post-doc.
- Reminder -- Peer Evaluation of Teaching is due.
  - Classroom parts of evaluations are due by March 6, 2015

**2. Committee Reports --**

**I. Undergraduate Subcommittee –**

**Update #1 –Freshman Development – Dr. Chandrashekhar**

**Past and Current activities --**

- Big Fridays (Spring 2015 schedule – February 13, March 20, and April 10)
  - toured Teaching & Research labs (Dr. Chandra’s labs)
  - toured EE Undergraduate labs

**Future plans –**

- Use 3C33 to showcase Microelectronics activities
- Need other research groups each to sign up for one tour day
- Other social functions to meet with high school students
  - Scholar/student socials-are prime recruiting grounds
  - Judging at school science fairs
  - Summer workshops – i.e. ELE (Engineering Learning Experiences), which we have participated in each summer

**Issue s–**

- EE has had a small turnout during Big Fridays. Need more publicity to entice students into the EE tours (instead of other departments)
- Need more exposure to high school students

**Next actions:**

- Request speaking time to highlight EE on the Big Friday tours before the large group breaks into dept tours. EE needs a chance to showcase.
- Provide list of dates for each Big Friday next semester and sign up research groups to each open their lab one time

**Update #2 – Eta Kappa Nu (HKN) ECE Honor Society– Dr. Zhang**

Number of current active members – 10

**Activities**

- HKN is registered with the university as a student organization
- Has had a few social events
- Inducted new members in Fall
- Elected officers
- Did some Tutoring/mentoring
- Filed Annual report with HKN National, and received \$110 Founder's payment for doing so
- Is meeting regularly

**Future plans –**

- Continue recruiting new members
- Hold a meeting in March to
  - Elect new officers
  - Identify the annual objectives
  - Plan some recent activities align with the objectives
  - Organize student members to help with the college/department activities such as Open House, Big Fridays, and Freshmen tours

**Issue –**

- Need an active, full-time, on-campus president
- Small pool of eligible members, and since most are inducted during senior year, they leave nearly as soon as they join. So must rely on the new members inducted as Juniors to serve as the officers.

**Next actions:**

- Need to update the website and move it to the EE Dept web server
- Will develop an activity report for the semester

**Update #3 –IEEE – Dr. Guoan Wang****Have held several Activities**

- Resume bootcamp with Career Center
- Lab safety and skills workshop (soldering etc.)
- Video games tournament
- Industry presentations (Nucor Corporation)
- Egg hunt planned in April

**Upcoming/Special Event**

- Will be attending and competing at IEEE SoutheastCon (April 9-12)
  - ~10-12 active participants
  - 4 task oriented teams
  - Fund raising from companies and IEEE include a planned bagel sale on St. Patrick's Day

**Next actions:**

- Will develop an activity report for the semester
- Will provide update on the results of SoutheastCon Competition at May faculty meeting.

**Update #4 –Student Advisory Board (SAB) – Dr. Mandal**

Dr. Mandal summarized the last SAB meeting. The full document is attached.

**Next actions:**

- Will have a meeting to prepare SAB for the Spring 2015 IAB meeting on April 10, 2015.
- Will report the follow up actions taken to resolve the issues raised by SAB.

**II. Graduate Committee – Dr. Matolak represented information on behalf of Dr. Ginn****Suggestion #1 – To standardize the ME Comprehensive Exam format, effective Fall 2015**

The Committee sought faculty input on this subject. As background, Dr. Matolak presented examples of the requirements for ME Comprehensive Exam from other universities.

**Concerns –**

- Time and effort spent on administering the ME Comprehensive exam and
- Need to understand the Graduate School’s rationale (actually CHE requirement?) for requiring ME students to pass an exam.

**Proposal --**

- Remove the exam from the degree requirements (maybe not possible)
- Develop a different method for assessing student’s ability to synthesize and integrate knowledge acquired in coursework, perhaps through enrollment in an “ME project” course that is managed by one person for all ME students in their final semester.

**Next actions:**

- The graduate committee will contact the Graduate School to inquire whether a comprehensive exam is always required. If exam is required, develop a method for time-effectively managing assessment of integration and synthesis of knowledge.

**Suggestion #2 – Evaluate reformatting the PhD Qualifying Exam**

Examples of PhD Qualifying Exam requirements from other universities were presented. The committee seeks input from the faculty to decide on an appropriate new format, if necessary, for our qualifying exam.

Dr. Dougal emphasized that, whichever format we to use, it should ensure the quality of our PhD students. It should ensure that they are qualified for doctoral-level study in their intended specialty. And if they will go on to teaching positions in EE departments, it should ensure that they are qualified to teach general EE courses.

**Next action:**

- The graduate committee will meet prior to the next faculty meeting and discuss a proposal of the appropriate exam format and bring the motion to the meeting.

**III. Report of the Chair –****Report #1 – Freshman Recruiting**

Dr. Dougal presented historical SAT distributions for admitted and enrolled students, and GPA distributions of enrolled students. After reviewing the data, here are some observations.

- Need to attract higher-quality students. The mean and lower limit are lower than desirable.
- Based on SAT score, the quality of the freshmen admitted during the past 4 years is decreasing. The average SAT declined from 1262.7 to 1140 – a rather remarkable decrease at a time when the university average is increasing.
- This is thought to be due to being out-competed by scholarships offered by other programs.
  - Our scholarship offers should aim to move the centroid of freshman who enroll towards an SAT score of 1200 -1400
  - Even if we don't get the best students, at least we should increase the average SAT scores of the students who do enroll.
  - Few of the very top students who apply enroll here, even if offered scholarships. So may be more effective to focus scholarship offers on students having lower scores but higher probability of accepting, as long as these increase the quality of the admitted student body.

**Next actions:**

- Personal contact with admitted students is important towards realizing enrollment. Dr. Dougal will assign a few faculty to call the top admitted students by March 20, 2015.

**Report #2 – Assessment Process – change to collect assessment information via Blackboard**

We will move to collect student performance assessment information using Blackboard. Faculty were polled to identify their current usage of Blackboard. The majority of the faculty have been using Blackboard to collect assignments, some to score homework, and some to report grades back to students.

**Next actions:**

- As a minimum, all faculty were asked to upload to Blackboard the following data for the courses they are teaching this semester, and if possible, for several prior semesters:
  - Copy of the final exam in pdf format
  - Actual (raw) final exam total scores. If possible, please upload the scores by individual questions. (this requires multiple columns, with total score being the total of all questions)
- A designated person (now, Nat Paterson) will collect the statistical information on student performance from BB for each course.

Meeting adjourned at 4:58 pm

**Student Advisory Board Meeting  
Electrical Engineering Department**

**Present:** Krishna Mandal,  
Advisor  
  
Brittany Richards,  
President  
Amanda Elliot, Vice  
President

**Recorder:** Ashley Burt

The meeting was called to order by Dr. Krishna Mandal in EE Conference Room 3A75 on October 30, 2014 at 12:10 PM.

The SAB members met to identify problems that were mentioned by their student peers and to propose solutions to the problems.

Problems	Proposed Solutions by SAB
<p><b>1. Size of SAB membership</b> -- SAB is too small and current members are graduating. Need higher participation level.</p>	<ul style="list-style-type: none"> <li>• Develop a plan to recruit new members, for example by SAB officers visiting ELCT 101/102/221.</li> <li>• Seniors need to better communicate with freshmen so they can share their experience.</li> <li>• Develop a "mentor" program which matches younger students to either seniors or graduate students to guide them through the program.</li> </ul>
<p><b>2. Not enough students are members of IEEE</b>– students apparently do not see benefits of the membership</p>	<ul style="list-style-type: none"> <li>• Provide incentive to be IEEE members to students</li> <li>• Involve more companies to sponsor IEEE activities to increase relationships between students and industry for future internships and jobs</li> </ul>
<p><b>3. Advisement</b> -- need better way for students to find information about things, like studying abroad, graduation process, etc., other than what courses to take</p>	<ul style="list-style-type: none"> <li>• There should be a designated person in the department to answer all advisement questions for easy access.</li> <li>• Advisement training for professors so they are up to date on rules &amp; procedures.</li> </ul>
<p><b>4. Accelerated Graduate Program</b> – not a lot of students know about it</p>	<ul style="list-style-type: none"> <li>• Need the info of this program on EE website</li> </ul>
<p><b>5. Retention</b> –</p> <ul style="list-style-type: none"> <li>• ELCT 101 is overwhelming instead of intriguing. Too much focus on solar.</li> <li>• Professors are not sufficiently available to talk to students</li> </ul>	<ul style="list-style-type: none"> <li>• Students liked ELCT 302 race; and suggested can be used as a highlight of the program and as a tool for retention</li> </ul>
<p><b>6. Lack of departmental activities</b> that bring together faculty and students in informal situations</p>	<ul style="list-style-type: none"> <li>• Need more social activities that will promote informal interaction between students and faculty.</li> <li>• Open the research labs to undergraduate students to demonstrate what kind of research projects are going on. For example, schedule an open lab day for students to visit all the research labs.</li> <li>• Arrange more seminars given by the faculty</li> </ul>

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	<ul style="list-style-type: none"><li>• Arrange more local field trips to visit plants and companies so students can see real world.</li></ul>
7. <b>Curriculum</b> – not enough credits for non EE course permitted.	<ul style="list-style-type: none"><li>• Allow more credits in the curriculum for outside courses to be considered as Career Plan.</li></ul>
8. Lack of student stories on the website	<ul style="list-style-type: none"><li>• SAB page should be created on EE website where students' accomplishment can be posted.</li></ul>

Meeting adjourned a 1:00 PM