

Program Performance Review: Culmination Meeting Memo Electrical Engineering, M.S.

The 2013-2014 Program Performance Review (PPR) process for Electrical Engineering, MS program concluded with a culmination meeting on May 8, 2015.

During the meeting, the program was commended for the significant progress made in the past several years, which includes:

1. All faculty members are well qualified in terms of their academic backgrounds, and have a wide range of recent publication activity.
2. Department Chair seems quite dedicated to the program and the students.
3. The program has very good and motivated students.

The major recommendations and concerns raised through the PPR process were discussed. Suggestions on how to address them were provided:

1. Faculty members are encouraged to engage in more research and scholarly activities
 - The interim chair indicated that there are “hot beds” of research in the department, but they only involve a small number of faculty. Some faculty do not have scholarly interest, and are difficult to motivate to engage in research. It is also a concern of the department that the current strong areas in terms of research activities are led by faculty who will retire soon. The interim chair believes that research needs to be built with new hires, and is working with the college to seek opportunities to do so.
 - The department also needs to engage more students in faculty-led research. The interim chair hopes that the energy brought in by new hires would help with this issue.
 - The Dean commented that most of the current full professors have not done research in recent years, but is not sure whether bringing new faculty into this department is prudent. There is history that a small group of faculty (2-3) brings down the morale of other faculty, and puts extra burden on them as well.
 - One suggestion was to merge the department with Computer Engineering to better balance mentorship/research when hiring new faculty.
 - The faculty suggested the possibility of bringing in full-time lecturers, but the interim chair did not think it would help with research activities.
2. Faculty are encouraged to move away from the over-reliance on oral examination as the terminal evaluation for the MS program.
 - The current faculty are generally ignorant of new pedagogy (e.g. HIPs, flipped classroom, etc.). The interim chair plans to bring in speakers to introduce new pedagogical ideas to educate the faculty.
 - There is currently no consistency in the oral exams. Some of them are even done in a foreign language. The college recommended the use of written exams drawing upon a question bank to improve consistency.

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- The program is currently working to switch the heavy emphasis on oral exams to comprehensive written exams. A plan is expected by the end of fall 2015.
3. Review concentration areas to ensure appropriate distribution of enrollment and resource allocation.
- The newly established New Graduate Studies Committee will review concentrations to re-develop them. The committee's charge is to complete the review and redevelopment in fall 2015.
4. Department procedures should be brought into conformance with university and system policies, especially with respect to number of graduate-level courses required/available and course cancellation practices.
- The college noted that a lot of leeway has been given to concentrations and degrees, since advising did not take place until after students have taken several courses (6-7). Graduate students' study plan is supposed to be completed by the 2nd semester and before completing 13 units (out of 30). The college recommended the interim chair to work with the Office of Graduate Studies to ensure compliance with this requirement.
 - The program is currently working to meet the university requirement that 50% of the units should be at the 400 level, and has had initial discussion on how to require graduate students to complete additional work beyond undergraduate peers in the class.
 - The Dean pointed out that the EE MS program is meant to continue professional development, and thus should allow for wider exposure to courses from different departments. While students currently are allowed to take 9 units from Computer Engineering, some faculty would not allow students to take courses from another department (in order to preserve scheduling). To prevent such incidents from taking place, the interim chair indicated that departmental rules are currently being developed to address this issue.