To: Kara Oswood  
  Director, Graduate Academic Affairs  
  UC Riverside  

Subject: Electrical Engineering Graduate Program Changes  

March 1, 2016  

Dear Ms. Oswood,  

The Department of Electrical and Computer Engineering (ECE) would like to make changes to the Electrical Engineering graduate program. These changes, as well as detailed justification for each, are described in the attached document showing the proposed Catalog text modifications.  

The following list briefly describes the main changes:  

- **Increasing the minimum-unit requirements for the MS program, and introducing minimum-unit requirements for the PhD program.** We propose to increase the minimum units required for an MS degree to 48 (from 36), and to introduce a minimum requirement of 36 graduate-course units for the PhD program (no such requirement currently exists). We believe that these changes will allow the students to improve the breadth and depth of knowledge in their selected areas of research, while also bringing the requirements of our program closer to the norm among the top programs in the country.  

- **Moving the normative time for PhD students taking the Oral Qualifying Exam to the end of the second year.** Currently, the normative time for students to take the Oral Qualifying Exam is the end of their first year in the program. However, since most students focus on coursework during the first year, they often have very little research experience, and the exam committee has very little information on which to judge the student’s research potential. We therefore propose moving the Oral Qualifying Exam to the end of the second year, at which time a more informed assessment of the students’ research capabilities is possible. As a result of this change the Proposal Evaluation Exam, which is normally held at the end of the 3rd year, becomes redundant, and is being removed.  

- **Changing the subject areas available to students in the Preliminary/Comprehensive exams.** In the current program, students must choose one of five different subject areas as their main focus area. This choice affects the courses they can take as part of their Preliminary or Comprehensive exams. Our experience has shown that the existing division in five areas often causes problems, as students’ research interests often span several areas, and additionally the distinctions among areas are sometimes hard to identify. We therefore propose moving to a setup with three different areas, which are much more clearly distinctive from a “technical” standpoint.  

- **Raising the minimum TOEFL score requirement for admission.** The current iBT TOEFL score threshold for admission to the graduate program is 80, which is the 37th percentile of iBT TOEFL scores. We propose to raise this to 90, which is the 60th percentile. This would help avoid cases of students who perform poorly due to poor language skills. Additionally, it will allow us to remove the requirement that students pass the SPEAK test prior to graduation, which is difficult to enforce.  

- **Introducing additional Professional-Development requirements for PhD students.** We propose to introduce requirements that will help improve PhD students’ writing and presentation skills. Specifically, students have to submit a Professional-Development report prior to advancing
to PhD candidacy. This will ensure that PhD students work on improving their writing and presentation skills early on in their studies, so that they can more effectively present their research in publications and conference presentations.

For additional details on the justification and implementation of these changes (and additional minor wording improvements/clarifications) please refer to the attached Catalog text.

The proposed changes have been approved by the ECE Department faculty on February 24, 2016, and if approved will be applicable to students entering the graduate program in Fall 2016.

Please do not hesitate to contact me if any additional information required.

Sincerely,

Anastasios Mourikis
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