Student-Faculty Conference Report (EE/CS Committee)

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1 Committee Members

- **Chair:** Yi-Nan Zhang, 2007, EE
- **Undergraduate Members:**
  - Vamsi Chavakula, 2008, EE
  - Jay Conrod, 2008, CS
  - Issac Garcia-Munoz, 2007, EE
  - Aditya Khosla, 2009, EE/CS
  - Cheng William Hong, 2009, CS
  - Vibha Laljani, 2009, CS
  - Matt Lew, 2008, EE
  - Dan Lo, 2009, EE
  - Radhika Marathe, 2009, EE/CS
  - Jennifer Yim, 2008, EE
- **Faculty Members:**
  - Babak Hassibi: Associate Professor of Electrical Engineering
  - Jason Hickey: Assistant Professor of Computer Science
  - David Rutledge: Chair, Division of Engineering and Applied Science; Kiyo and Eiko Tomiyasu Professor of Electrical Engineering
  - Yu-Chong Tai: Professor of Electrical Engineering and Mechanical Engineering; Executive Officer for Electrical Engineering
  - Chris Umans: Assistant Professor of Computer Science

2 Background

2.1 Overview

The Computer Science option, in the division of Engineering and Applied Science, was officially offered as a major starting with the class of 2004. The program provides considerable flexibility in course selection, together with a capstone project giving an opportunity for independent work in an area of the student's choice. Currently there are ∼60 undergraduates in the major.

The Electrical Engineering option, in the division of Engineering and Applied Science, is closely allied with computation and neural systems, applied physics, bioengineering, computer science, and control and dynamical systems. Currently there are ∼54 undergraduates in the major.

2.2 Committee and Meetings

The SFC committee on EE/CS was formed by signup during first term. Signup sheets were posted on the Olive Walk near the undergraduate student houses and a student chair and student committee members were selected from those who signed up. Faculty committee members were selected from the EE and CS departments to be on the committee based on response time and availability.

The first meeting was held during first term. Due to faculty promotion as an official EE faculty meeting, most EE faculty were present. The CS faculty who were on the committee were also present, along with most of the students on the committee. For this meeting, we had several bullet points about each of the majors that were discussed.

During second term we had two meetings. The first meeting was students-only where we came up with some questions to ask for our surveys. The questions concerned the major in general, individual required courses, and student-faculty interaction. We then had a meeting with students and faculty on the committee to have more discussion on these survey questions.

The questions were made into two surveys, one for CS majors and one for EE majors. Each survey was broken into three parts: Curriculum, Student-Faculty Interaction, and Individual Courses.

3 Research

Informal discussions were held to determine meeting agenda. During the meetings, many other points were raised and attendees were asked to come up with survey questions. A survey was put up on http://www.surveymonkey.com/ for each major. For CS, we got 22 responses and for EE, 21. Several of the questions were open-ended or had an option for an open-ended response. In these cases we got good results, especially for CS.

3.1 Primary Responses of CS Majors

In general, most CS majors (75%) thought that the number of requirements was just right. However, there were quite a few complaints about the different areas of CS not being covered in correct proportion. More importantly, most respondents would like to see more variety in the classes that are offered (cryptography and AI are two examples).

3.2 Primary Responses of EE Majors

About 50% of respondents regarded the number of EE requirements as being just rihgt. Most of the rest considered EE to have too many requirements. Most of the questions asked in the EE survey concerned each class individually. In general, the problems concerned courses being too difficult or under-unitted, or having insufficient office hours.

3.3 Responses on Student-Faculty Interaction

These questions were the same for both surveys. The responses were also similar from both groups.

Most repondents agreed that the best way to give feedback was through anonymous forms on a website (especially those that can be submitted any time). Most respondents also agreed that it would be a good idea to have once-a-term meetings between students and faculty in the major to discuss courses and the major in general, although a few respondents felt that once a month was too often. Most students would like more interaction with their academic advisors and they felt that it would be a good idea to require advisors to take their advisees out to lunch once a term.

4 Focus

For CS, the most troublesome points have to do with the major as a whole, such as not having enough classes and the major not having enough structure.

For EE, the most troublesome points are with each class individually.

We would like to pursue these problems with the CS and EE departments and make recommendations. However, we expect that changes will be slow or perhaps not even made, since many recommendations would require adding new classes (and perhaps hiring new faculty) or restructuring classes completely.

As for feedback and student-faculty interaction, we would like to recommend three points:

- Have anonymous forms on a website which students could fill out anytime to submit feedback on classes.
- Have once-a-term meetings between faculty and students of each major to discuss the term. Free pizza should be provided.

- Require advisors to take their academic advisees to lunch once a term.

5 Recent Changes

//Will fill out after SFC?