Program Name: Ph.D. in Electrical Engineering
Date: Sept. 29, 2006

School/College: Engineering
Campus Box: 44

A. Mission Statement

To prepare students for careers in Electrical Engineering and related fields.

B. Constituents

The graduate students in the Department of Electrical and Computer Engineering are the program constituents.

C. Program Objectives

a. To ensure the admission of qualified students into the program each year.
b. To provide qualified faculty for the program.
c. To provide appropriate laboratories for the program.
d. To provide an appropriate variety of graduate courses for the program.
e. To enroll a sufficient number of students to support the courses offerings.
f. To achieve an acceptable placement rate within one year of graduation.
g. To ensure graduates are satisfied with the program (three years after graduation).

D. Educational Student Outcomes

a. To ensure continued quality of student performance during the program.
b. To show competency in their areas of specialty.
c. To be able to self-educate.

E. Assessment of Program Objectives

a. Program Objective (a) – Admission of qualified students:

- Admit fewer than 20% of the qualified applicants into categories other than “full standing”. Admission to full standing requires a Master of Science degree in electrical engineering or related field with a minimum GPA of 3.5 out of 4.00 in undergraduate studies.
- Admit only international applicants who meet the minimum TOEFL score of 550 paper-based or 213 computer-based.

Results:

- During the academic year 20XX-20YY, XX students were admitted to the program in full standing and XX were admitted on probation.
- XX number of international students met the TOEFL score requirement.

b. Program Objective (b) – Providing qualified faculty for the program:

- More than 80% of the faculty members must be full members of the graduate faculty and have doctoral chairing status.

Results:

- XX tenure-track and tenured faculty members have doctoral chairing status.
c. **Program Objective (c) – Providing appropriate laboratories:**

- Appropriate technical personnel must be available for service and maintenance of the department laboratories.
- Students must have access to the laboratories appropriate for their areas of specialty.

**Results:**

- The department employs XX full-time technician and XX student assistant to help in maintaining the department laboratories.
- During the academic year 20XX-20YY the evaluation of all department personnel showed a satisfactory performance level.

d. **Program Objective (d) – Appropriate variety of graduate courses:**

- The department must offer 10 or more graduate level courses in each semester, excluding thesis and dissertation hours.

**Results:**

- The department’s offering of the graduate courses during the academic year 20XX-20YY was as follows: XX courses in Fall 20XX, XX courses in Spring 20XX.
- Graduate School Exit Survey results indicate that the graduates were satisfied/not satisfied with the level of access to the laboratories.

e. **Program Objective (e) – Enrolling Sufficient Number of Students:**

- The department must enroll more than 15 degree-bound students per semester.
- The department must grant in excess of 2 Ph.D. degrees per academic year.

**Results:**

- At the end of the 20XX-20YY academic year, the department enrolled XX degree-bound graduate students (approximately XX equivalent full-time degree-bound students) in the program.
- In Fall 20ZZ, there were XX non-degree graduate students majoring in electrical engineering.
- During the academic year 20XX-20YY the department granted XX degrees.

f. **Program Objective (f) – Placement rate and graduate school admission:**

- More than 85% of the graduates of the program must be placed within six months of graduation.

**Results:**

- From the XX graduates, XX are known to be employed. The status of the rest is not known. Please see Table 1.

g. **Program Objective (g) – Satisfaction with the program:**

- Graduate School will provide the resources to survey the graduates of the program every three years.

**Results:**

- To be determined.
F. Assessment of Educational Student Outcomes

a. Educational Outcome (a) – Student performance:
   • Students are required to maintain a cumulative GPA of 3.00 out of 4.00 while enrolled in the program to maintain full standing.
   • Students are required to complete a minimum of 30 graduate semester credit hours of coursework beyond the MS degree in addition to 24 hours of dissertation.
   • Students are encouraged to submit their dissertations for publication. (Results: need to indicate the # who submitted for publication out of the total who completed the thesis option.)

Results:
   • During the academic year 20XX-20YY, n students were placed on probation and m students were dismissed.
   • During the academic year 20XX-20YY, k students graduated with an average of pp hours.
   • During the academic year 20XX-20YY, n students graduated and k were co-authors on publications at national conferences.

b. Educational Outcome (b) – Competency in areas of specialty:
   • The students must pass, at least five courses in their major area of specialty, identified by the faculty advisor on the plan of study.
   • Students must pass at least two graduate level courses in their minor area of specialty.

Results:
   • XX number of graduates had passed the major courses on their plans of study.
   • XX number of graduates had satisfied the requirement of two courses in their minor area of specialty.

c. Educational Outcome (c) – Self Education:
   • More than 85% of the graduates must have demonstrated the ability for independent research.

Results:
   • During the academic year 20XX-20YY, all graduates of the program (100%) completed their dissertations, which require independent research. (Attached table)

G. Feedback into the Program

Process:
The department has a Graduate Committee. This committee meets annually to review the results of the assessment and to provide feedback into the program. The same committee also reviews the program mission, objectives, outcomes, and the assessment process periodically and in consultation with other faculty members.

Results:
   • During the academic year 20XX-20YY, based on assessment results, the following recommendations were made ............... 
   • During the academic year 20XX-20YY the committee reviewed the program mission, the objectives, and the assessment process. The following recommendations were made by the committee:
1. Objective (a) – In light of the changes that have taken place within the aerospace industry since ........

2. Objective (g) – In order to track the graduates, ........

H. Annual Report:

The Assessment Report documents:

- results from data collection during the academic year
- dates when faculty met to consider the results
- summary of decisions made at the meeting of the faculty
- when issues identified at the meeting will be considered again
### Table 1: Ph.D. Degree Recipients

**Academic Year 20XX-20YY**

<table>
<thead>
<tr>
<th>Semester / Name</th>
<th>Degree Option</th>
<th>Employer / Graduate School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>August 20XX:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bob Graduate 1</td>
<td>Dissertation</td>
<td>Korea Institute of Technology</td>
</tr>
<tr>
<td>Bob Graduate 2</td>
<td>Dissertation</td>
<td></td>
</tr>
<tr>
<td><strong>December 20XX:</strong></td>
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<td></td>
</tr>
<tr>
<td>Bob Graduate 1</td>
<td>Dissertation</td>
<td>King Mon kut University - Thailand</td>
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<tr>
<td>Bob Graduate 2</td>
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<tr>
<td><strong>May 20YY:</strong></td>
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<td></td>
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<tr>
<td>Bob Graduate 1</td>
<td>Dissertation</td>
<td>Unknown Status</td>
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<tr>
<td>Bob Graduate 2</td>
<td>Dissertation</td>
<td>Cessna Aircraft</td>
</tr>
</tbody>
</table>