DEFINITION OF TERMS
IN THE GRADUATE PROGRAM ASSESSMENT PROCESS

A. Program Mission: How the program intends to serve its constituents.
   The department, by some means, composes the mission statement of its graduate program. The mission statement
   articulates the nature and the purpose of the program.

B. Program Constituents: Who is to be served by the program.
   Primary constituent group is graduate students in the program.

C. Program Objectives: The means by which the program ensures delivery of the promised services.
   The department, by some means, identifies a set of indicators that can be used to ensure the delivery of its
   mission.

D. Educational Student Outcomes: The information and skills the students need to learn.
   The department stipulates what the student will know, believe and be able to do upon completion of the program.
   Outcomes should be observable and measurable.

E. Assessment of Program Objectives: Assessment is the process of gathering, analyzing and interpreting evidence
   about the effectiveness of the program. The department establishes the tools by which to measure and determine
   if program objectives are being met.

F. Assessment of Educational Student Outcomes: Assessment is the process of gathering, analyzing and interpreting
   evidence about the effectiveness of the program. The department establishes the tools by which to measure and
   determine if educational student outcomes are being met.

G. Feedback Loop: The process by which faculty evaluate the evidence collected to make reasoned changes in the
   program whenever necessary to enhance or improve the program. The department establishes a procedure for
   faculty to evaluate the evidence collected each year. This evidence is used to make decisions about program
   changes and ensure continuous improvement.

H. Annual Report: An Assessment Report produced annually that indicates:
   1. results from data collection during the academic year (based on assessment plan)
   2. record of dates the Graduate Assessment Committee met to consider the assessment results
   3. summary of the decisions made at the meetings by the faculty
   4. summary of how assessment data was used to improve the program
   5. the assessment plan for the next academic year
   6. progress on items in the Memorandum of Understanding*

I. Assessment Plan: This document specifies the:
   Program mission
   Program constituents
   Program objectives
   Educational student outcomes
   Program assessment activities (when and how the various program objectives will be measured)
   Educational student outcomes assessment activities (when and how the various educational student outcomes will
   be measured)
   Feedback loop used by the faculty

* This document is jointly produced (by deans and the program area) after KBOR Program Review. It specifies goals
(a and timelines for accomplishment of those goals) to improve the program based on recommendations coming from the
KBOR review process.
Program Name: PhD in Aerospace Engineering Date: October, 2006
School/College: Engineering Campus Box: 44

A. Mission Statement

To prepare students for careers in Aerospace Engineering and related fields, research organizations, and universities.

B. Constituents

The graduate students in the Department of Aerospace 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 either in jobs or in graduate programs for further study.
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:

- Admission to full standing requires a Master of Science degree in aerospace engineering or related field with a minimum GPA of 3.25 out of 4.00 in the last 60 hours.
- Admit only international applicants who meet the minimum TOEFL score of 550 paper-based or 213 computer-based.

Results:

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

- More than 90% of the faculty members must be full members of the graduate faculty and have doctoral chairing status.
Results:

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:

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:

e. **Program Objective (e) – Enrolling Sufficient Number of Students:**
   - The department must enroll more than 10 degree-bound students per semester.
   - The department must grant in excess of 2 PhD degrees per academic year.

Results:

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 either in jobs or in graduate programs for further study.

Results:

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:

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. Students are required to complete 60 graduate hours which includes courses from master’s program and an additional 24 hours of dissertation. Students must pass a comprehensive examination conducted by the students advisory committee.
Each student is required to have a final oral examination on his/her dissertation upon completion of his/her work, and to pass the exam administered by the student advisory committee. The performance of students will also be assessed by their awards, journal articles, research papers and reports, and conference presentations and proceedings authored by the student.

Results:

b. Educational Outcome (b) – Competency in areas of specialty:

- The students must pass five core courses in each area of specialty, identified by the faculty in that area.
- Students must pass at least two graduate level course in mathematics or statistics.

Results:

c. Educational Outcome (c) – Self Education:

- More than 85% of the graduates must have demonstrated the ability for independent research.

Results:

G. Feedback into the Program

Process:

The graduate coordinator is responsible for collection of the data pertaining to the assessment report. The department has a Graduate Committee composed of the two graduate coordinators and a third member appointed by the department chairperson. 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:

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