

GRADUATE PROGRAM ASSESSMENT PLAN, 2006-2007
WICHITA STATE UNIVERSITY

Program Name: Doctor of Philosophy in Mechanical Engineering **Date:** October 21, 2006

School/College: Engineering **Campus Box:** 133

A. Mission Statement

The mission of the Department is to prepare students for careers in Mechanical Engineering and related fields. The mission is in support of the College of Engineering as well as that of the University in teaching, scholarship and service.

B. Constituents

The constituents of the Mechanical Engineering Graduate program are its graduate students and faculty.

C. Program Objectives

- a. To admit and retain qualified students into the program each year.
- b. To attract and retain qualified faculty for the program.
- c. To provide an exceptional research environment for the program.
- d. To provide a full range of graduate courses for the program.
- e. To ensure our graduates are well prepared for employment and further Post Doctoral studies.

D. Educational Student Outcomes

- a. Students will gain in-depth knowledge base in one of the following areas: Materials, Thermal-Fluid Sciences, Mechanical Systems/Design/Controls.
- b. Students will demonstrate the ability to carry out independent research or projects.
- c. Students will be able to self-educate.

E. Assessment of Program Objectives

a. Admission of qualified students

- All students are required to have a GPA of 3.5 out of 4.0 or equivalent.
- When admitting students from any area other than Mechanical Engineering, require them to take appropriate prerequisite courses.

b. Providing faculty with excellent credentials for the program

- Most of the faculty members must be full members of the graduate faculty and have doctoral chairing status.

c. Providing state-of-the-art laboratories and facilities

- 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.

d. Appropriate graduate curriculum

- The department should strive to offer sufficient graduate level courses in each semester to allow students in each of the program core areas to graduate within three to four years.
- Each student is required to pass comprehensive exams, present an original research proposal, and prepare and defend a dissertation based on original research.
- Establish a core curriculum for the Ph.D. degree.

e. Enrolling Sufficient Number of Students

- The department should strive to enroll at least one Ph.D. student per faculty member.
- The department should strive to grant at least one Ph.D. degree per academic year.

f. Placement rate and graduate school admission

- Graduates of the program should be placed within one year of graduation either in jobs or in a post-doctoral position for further study.

g. Satisfaction with the program

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

F. Assessment of Educational Student Outcomes

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 60 graduate semester credit hours.
- Students are required to complete a minimum of 24 credit hours of dissertation research.
- Students are encouraged to submit their dissertation for publication.

b. Competency in areas of specialty

- The students must take at least six core courses in their area of specialty, identified by the faculty in that area.

c. Self Education

- The graduates must have demonstrated the ability for independent research.

G. Feedback into the Program

Process:

The department has a Graduate Committee composed of the graduate coordinator and two faculty members in the department. 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.

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