

**GRADUATE PROGRAM ASSESSMENT PLAN, 2006-2007**  
**WICHITA STATE UNIVERSITY**

**Program Name:** Master of Science in Mechanical Engineering **Date:** October 14 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, and for graduate study. 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 graduate studies as well as continuing education.

**D. Educational Student Outcomes**

- a. Students will gain in-depth knowledge base in one of the following areas: Materials Science, Thermo-Fluid Sciences, Design and 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 3.0 out of 4.0 or equivalent.
- For international students, admit students with only a "First Class" (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 two years
- Establish a core curriculum for the Master of Science degree.

**e. Enrolling Sufficient Number of Students**

- The department should strive to enroll at least three Master of Science students per faculty member.
- The department should strive to grant at least one Master of Science degree per academic year per faculty member.

**f. Placement rate and graduate school admission**

- Graduates of the program should be placed within one year of graduation either in jobs or in graduate programs 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 30 graduate semester credit hours for thesis option or 33 hours for non-thesis or directed-project options.
- Students with the thesis option or the directed-project option are required to pass an oral examination on their thesis or directed project. Students with the non-thesis option are required to pass a written examination in their major field of study.
- Students are encouraged, but not required, to submit their theses for publication.

**b. Competency in areas of specialty**

- The students must take at least three 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