



MME CURRICULUM COMMITTEE
Florida International University
Department of Mechanical & Materials Engineering
Miami, Florida

MINUTES

September 16, 2005

The MME curriculum committee met on Friday, September 16th at 11:00 am in the MME Conference Room, EC 3327.

Attendees: Dr. Arvind Agarwal, Dr. Sukky Jun, Dr. Cesar Levy, Carmen Schenck, and Dr. Sabri Tosunoglu.

Agenda Items Discussed:

CHANGES IN PHD CREDIT REQUIREMENTS

The committee unanimously accepted to adopt the proposed change of required credits in the PhD program from 90 to 78.

ADMISSION REQUIREMENTS

The committee discussed the graduate program admission requirements and adopted the following rules:

PhD Admission Requirements

GPA of at least 3.0 in undergraduate work. Students applying with a recognized MS degree must also have a minimum GPA of 3.3 in MS work.

GRE score of at least 1150 points on the verbal and quantitative sections with the following minimum on the individual components: verbal ≥ 450 and quantitative ≥ 650 .

Three letters of recommendation.

For students whose native language is not English, a computerized TOEFL score of at least 213.

MS Admission Requirements

GPA of at least 3.0 in undergraduate work.

For students whose native language is not English, a computerized TOEFL score of at least 213.

Students applying for any funding from the university must take the GRE exam and obtain a GRE score of at least 1100 points on the verbal and quantitative sections with the following minimum on the individual components: verbal ≥ 350 and quantitative ≥ 650 .

Uniformity of Graduate Program Admission Requirements on the Web

It is noted that the listed admission requirements for the department are not uniform at various sites and needs to be corrected. Dr. Agarwal will be in charge of making the changes at the following sites:

- Department: MME Site
- College: CEC Site
- FIU: UGS Site
- University Graduate Catalog

It is also suggested that a similar review be made by Dr. Tao for undergraduate admission requirements.

REQUIRED COURSES IN MS AND PHD PROGRAMS

After lengthy discussions, the following views emerged although a final decision has not been reached:

MS Program

Require students to take two math courses:

EGM 5315 Intermediate Analysis of Mechanical Systems (This is an analytical methods course.)

EGM 5346 Computational Engineering Analysis (This is a numerical methods course.)

Select the rest of the courses from the list below with the guidance and approval of the advisor:

Math (suggested courses will be listed in each area)

Thermo/Fluids

Mechanics, Design and Robotics

Materials Science

It was pointed out that while this will provide flexibility to choose courses as necessary, it might be possible that we may not be able to populate any of the grad courses. A remedy to this may be to offer a limited number of courses in each area, and to plan well ahead of time which courses to offer – which is mostly the case in the department.

It was also discussed that EGM 6422 (Advanced Analysis of Mechanical Systems) which is a numerical methods course will be listed as an elective course with a course name and prerequisite change as follows:

EGM 6422 Advanced Analysis of Mechanical Systems: Change the course name to “Advanced Computational Engineering Analysis” and make EGM 5346 a prerequisite.

PhD Program

General consensus was similar to the MS program. That is, we may ask every student to take a number of math courses (currently 3 courses in the catalog) from a list of electives.

Then the advisor and student will be able to select the rest of the courses as appropriate.

Qualifying Exam

Provide an option to the students to take a number of graduate courses and pass them with a GPA of 3.0 or higher, and avoid taking the written qualifying exam. Dr. Agarwal will prepare the policy statement for this option.

PREREQUISITE CHANGES

In view of the automation of prerequisite checks through PantherSoft, the university has allowed a simpler procedure to submit proposals for prerequisite changes. We revised the regular course change request form for this purpose.

Carmen Schenck has submitted a number of prerequisite changes. These are necessitated because of the recent changes in our undergraduate program. Carmen will prepare these changes using the new form and submit it again.

GRADUATE CERTIFICATE PROGRAMS

Graduate Certificate in Mechanical Engineering has been approved last spring. Our department will develop two more such certificate programs as approved by the MME faculty last year:

Graduate Certificate in Materials Engineering (Lead: Dr. Jones)

Graduate Certificate in Mechanical Engineering Professional Development (Lead: Dr. Hopkins)

PHD TRACK IN MATERIALS SCIENCE AND ENGINEERING

The draft proposal submitted to the departmental committee by Dr. Norman Munroe will be submitted to the college curriculum committee next week during the regular committee meeting.

The meeting adjourned at 1:00 pm.

Prepared by Sabri Tosunoglu