



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

MINUTES

October 13, 2004

The MME Curriculum Committee met in the MME conference room, EC 3327. The following committee members and faculty colleagues were present: Dr. Arvind Agarwal, Dr. Sukky Jun, Dr. Yong Tao, Dr. Gordon Hopkins, Ms. Carmen Schenck, Dr. Diana Rincon (guest), Dr. Wei-Yu Bao (guest), Dr. Ibrahim Tansel (guest), Dr. George Dulikravich, and Dr. Sabri Tosunoglu.

A summary of the topics discussed is presented below:

MME Courses on Computations

- EML 1xxx Introduction to Mechanical Design (2)

This will possibly be a required, 2-credit course. It will include an introduction to engineering drawing, dimensioning, tolerance specs, etc., and use CAD packages to create 3D parts and assemblies - as well as 2D engineering drawings.

Dr. Bao will prepare the new course and course summary form.

The committee will explore the option to increase the total number of credit hour requirement to 130 as civil engineering has it. I am checking it with the university to find out the procedure to do this.

- EML 2xxx Programming for Mechanical Engineers (3)

The course proposal prepared in Spring 2004 by Dr. Tansel will be submitted as a regular course proposal.

- EGM 3311 Analysis of Engineering Systems (3)

A course change proposal will be submitted to change: (1) The course description, (2) Prerequisite: MAP 2302 Differential Equations, and EML 2xxx Programming for Mechanical Engineers.

Need to name the faculty to submit the changes.

- EML 3xxx Software for Mechanical Design (3)

Submit a new course proposal describing the followings:

SolidWorks: 3D CAD, grid generation, stress analysis, thermal analysis

SolidWorks and Ansys for stress analysis

SolidWorks, StarCD and Fluent for fluid flow analysis

IOSO for multi-disciplinary optimization

Elements of parallel programming

Prerequisites: EGN 3343, EMA 3702, and EML 3126.

Need to name the faculty to prepare and submit the proposal.

New course proposals submitted to the MME curriculum committee:

EML 2XXX Programming for Mechanical Engineers (as described above; will be submitted as a permanent course)

EML 4XXX Introduction to Nondestructive Testing and Mechanical Health Monitoring

EML 4XXX Robot Design (to complement the existing graduate level course)

EMA 5XXX Atomistic Computer Modeling of Materials (course title later revised as Nanoscale Modeling of Materials)

EML 5XXX Advanced Nondestructive Testing and Mechanical Health Monitoring

Course change proposal submitted:

EML 4220 Mechanical Vibrations

Experimental course proposals to be prepared for courses to be offered in Spring 2005:

EML 2XXX Programming for Mechanical Engineers

EML 4XXX Robot Design

EMA 5XXX Nanoscale Modeling of Materials

Sabri Tosunoglu, Ph.D.

Chair, MME Curriculum Committee

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