

TO: The Engineering Faculty

FROM: The Faculty of the School of Mechanical Engineering

DATE: August 23, 2000

RE: ME 263 Course Description Changes

The Faculty of the School of Mechanical Engineering has approved the following changes in course description and prerequisites effective Spring Semester 2001. This action is now submitted to the Engineering Faculty with a recommendation for approval.

FROM:

ME 263 Introduction to Mechanical Engineering Design . Sem. 1 and 2. Class 2, lab 3, cr. 3. Prerequisite: ME 200, 270, CGT 155; corequisite: MA 262, ME 290.

The design process in the broad context of the engineering enterprise. Conceptual design including visualization, problem definition, information searches, and shape synthesis. Intermediate design including modeling and analysis, decision theory, and parametric design concepts. Detailed design, including design for manufacturing and assembly, and tolerancing. Design documentation and communication. Emphasis on computer tools in support of engineering design. Case studies and examples from industry.

TO:

ME 263 Introduction to Mechanical Engineering Design . Sem. 1 and 2. Class 2, lab 3, cr. 3. Prerequisite: ME 200, 270, CGT 163; corequisite: MA 262, ME 290.

The product design process in the broad context of Mechanical Engineering. Development of design problem definitions by evaluating customer inputs, technology, and competitive products. Generation of conceptual design using structured and unstructured approaches. Evaluation of concepts using engineering modeling and decision matrices. Product detail design including design for manufacturability and profitability. Effective design communication: oral, written, and graphical.

REASON: The updated description more accurately describes the current content of the course. The changes are largely editorial with some slight changes in emphasis because of the evolution of the course. Also the prerequisite CGT 155 is being changed to CGT 163, which will emphasize 3-D solid modeling.

APPROVED FOR THE FACULTY
OF THE SCHOOLS OF ENGINEERING
BY THE COMMITTEE ON
FACULTY RELATIONS

CFR Minutes # 929

Date 10/11/00

Chairman CFR C.D. Sutton

E. Daniel Hirleman /GDJ
E.D. Hirleman, Head
School of Mechanical Engineering