

MECHANICAL ENGINEERING PROGRAM
ABET COURSE SYLLABUS

ME 220: ME 220 - 3D Modeling with Pro Engineer (1 credit): Required Course

Course Description (2008-2010 Catalog): Parametric, feature-based solid modeling with ProEngineer software package. Credits 1

Prerequisite Course: None

Textbook:“ Pro/ENGINEER Wildfire Tutorial and Multimedia CD by Dr. Roger Toogood

Other Reference Material: N/A

Course Coordinator: Z.Y. Wang, Associate Professor

Course learning outcomes: The main objective of the course is learning the 3-Dimensional modeling of mechanical systems using Pro/Engineer software. The course includes generating solid models, assemblies and drawings of different systems using Pro/E Wildfire 3.0

Relationship of Course to Mechanical Engineering Program Educational Outcomes:

Goal 1: Provide mechanical engineering graduates with technical capabilities.					Goal 2: Prepare the mechanical engineering graduates to have effective workplace skills.				Goal 3: Instilling a sense of responsibility as a professional member of society.			
1.a	1.b	1.c	1.d	1.e	2.a	2.b	2.c	2.d	3.a	3.b	3.c	3.d
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Topics Covered:

- 1) Introduction to Pro/Engineer Wildfire-3 User Interface, View Controls & Model Structure;
- 2) Pro/E Sketcher and few practice examples
- 3) Solid Modeling Part-1, (Extrude, Revolve, Sweep, Blend & Chamfer features);
- 4) Solid Modeling Part-2, (Hole, shell, Rib, Draft, Mirror, Pattern features);
- 5) Creating Datum Planes, Datum Axis & Datum Point), Modifying features, Model analysis, Modeling Utilities;
- 6) Creating Assembly in Pro/E, Assembly Constraints;
- 7) Assembly Operations, Assembly Drawings;

Laboratory Projects: In-class assignments and homework are assigned weekly, and projects are given in the 10th week.

Class/Laboratory Schedule: W 7:00-10:00 PM (Fall Semester)

Assessment of Student Progress toward Course Objectives

In-class assignments are conducted every class and are consist of the material being covered that day. Attendance is mandatory to obtain a grade for in-class assignments.

Contribution of Course for meeting Professional Component:

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| (a) Mathematics and basic sciences: | 0 credit |
| (b) Engineering Topics (Design/Science): | 1 credit |
| (c) General Education: | 0 credit |
| (d) Others: | 0 credit |

Prepared By:
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Date:
October 2, 2009