

MM 453 Computer Aided Design				DEPARTMENT OF MECHANICAL ENGINEERING					
Semester	Methods of Education							Credits	
	Lecture	Recit.	Lab.	Project /Field Study	Homework	Other	Total	Credit	ECTS Credit
7	28	14	-	20	13	-	75	3	3.0
Language	Turkish								
Compulsory / Elective	Elective								
Prerequisites	None								
Course Contents	Introduction to Comp. Aided Design. Advantage of the solid modeling. 2D design. Converting to the solid body. Creating details on solid bodies. Creating multiple solids. Assembly. Obtaining technical drawings. Surface modeling techniques.								
Course Objectives	The aim of this course is to get students to make designs by any CAD software and be able to design their project titles.								
Learning Outcomes and Competences	Students who accomplish this course: 1. Describe the role of an engineer in a project team. 2. Calculate, design and present a mechanism or a whole system.								
Textbook and /or Reference	1. Başak H. "Inventor 2008" Seçkin Yayınları, Ankara, 2009. 2. F.E. Giesecke, A. Mitchell, H.C. Spencer, I.L. Hill, J.T.Dygdon, J.E. Novak, 'Technical Drawing' 12th Ed., Printice Hall, New Jersey, 2003. 3. Göloğlu, C. ve Öztürk. A., "Pro-Engineer Wildfire 2.0", Seçkin Yayıncılık, Ankara, 2005								
Assessment Criteria						If any, mark as (x)		Percentage (%)	
	Midterm Exams					X		40	
	Quizzes					-		-	
	Homeworks					X		15	
	Projects					X		40	
	Term Paper					-		-	
	Laboratory Work					-		-	
	Other					X		5	
Final Exam					-		-		
Instructors	Assist.Prof. Yusuf USTA								
Week	Subject								
1	Introduction to Comp. Aided Design. Advantage of the solid modeling.								
2	2D design. Placing 2D geometrical constraints and dimensions to a sketch.								
3	Converting to a solid body.								
4	Creating details on solid bodies such as holes, rounding, chamfering.								
5	Creation and selection of working planes and applications.								
6	Advanced sold modeling commands, sweep, loft, intersection.								
7	Creating multiple solids, copying.								
8	Obtaining technical drawings from a solid model. Dimensioning.								
9	Midterm I								
10	Assembly, 3D geometrical constraints.								
11	Standard parts and their usages. Bolts, bearings, profiles, sealing elements, lubricators etc.								
12	Project representations.								
13	Project representations.								
14	Project representations.								