

MM 106 Computer Aided Technical Drawing II				DEPARTMENT OF MECHANICAL ENGINEERING					
Semester	Methods of Education							Credits	
	Lecture	Recit.	Lab.	Project / Field Study	Homework	Other	Total	Credit	ECTS Credit
2	28	14	42	-	40	26	150	3	6.0
Language	Turkish								
Compulsory / Elective	Compulsory (Specially Evaluated)								
Prerequisites	None								
Course Contents	Tolerances of fit. Surface quality marks and form tolerances. Keys, springs, locking devices. Riveted and welded contructions. Gears. Cams. Working drawings and assembly drawings. Introduction to descriptive geometry, auxiliary views and visibility. Piercing points, line of intersection, angle between planes. Parallelism, perpendicularity, angle between line and plane. Intersection of planes with planes, intersection of planes with solids. Intersection of solids with solids. Development. Piping layouts.								
Course Objectives	The aim of this course is to teach the students the following topics in CAD so that they can design and draw the working srawings and the assembly drawings of some components.								
Learning Outcomes and Competences	The students should be able to: 1. Describe relations between drawing-design and part-system. 2. Describe the role of the engineer in a CAD-CAM system. 3. Draw the assembly drawing of the given components of a system or draw the detail drawings of the components of a given assembly drawing of the system. 4. Design some simple components and assemblies.								
Textbook and /or Reference	1. Şen, İ.Z., ve Özçilingir, N., "Makina Resmi", Deha Yayıncılık, İstanbul, 2004. 2. Şen, İ.Z., ve Özçilingir, N., "Teknik Resim-Temel Bilgiler", Deha Yayıncılık, İst., 2002. 3. Bağcı, M., Teknik Resim, Cilt I, Cilt II, Birsen Yayınevi, İstanbul, 2000. 4. Şen, İ.Z., ve Özçilingir, N., "Standart Makina Elemanları Çizelgeleri", Deha Yayıncılık, İstanbul, 2004. 5. Özdenler, F., "Tasarı Geometri - Temel Ders Kitabı", Milli Eğitim Bak. Yayınları, 2001. 6. Earle, J.M., "Drafting Technology", Addison Wesley, 7. Pare, E.G., at al., "Descriptive Geometry", MacMillan Pub. Co.								
Assessment Criteria						If any, mark as (x)	Percentage (%)		
	Midterm Exams					X	35		
	Quizzes					-	-		
	Home works					X	20		
	Projects					-	-		
	Term Paper					-	-		
	Laboratory Work					-	-		
	Other					X	5		
	Final Exam					X	40		
Instructors	Assist.Prof. Nihat GEMALMAYAN, Assist.Prof. Yusuf USTA, Dr. Yavuz ZUMRUT								
Week	Subject								
1	Tolerancing and Fitting, Introduction the Autocad Mechanical.								
2	Geometric Tolerancing, Autocad Mechanical basic commands.								
3	Surface roughness, Autocad Mechanical basic commands.								
4	Threaded parts, Bolts, nuts.								
5	Threaded parts, washers, studs, other screws, thread standards.								
6	Keys, springs, locking devices.								
7	Keys, springs, locking devices.								
8	Welded joints.								
9	Bearings.								
10	Midterm								
11	Gears and racks.								
12	Design,working and assembly drawings.								
13	Design,working and assembly drawings.								
14	Introduction to Descriptive Geometry. Auxilary views.								