COMPUTER AIDED DRAWING I

1	Course Title:	COMPUTER AIDED DRAWING I
2	Course Code:	MKNZ108
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	2
11	Prerequisites:	Basic technical drawing, machine drawing and skill of using computer .
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. ABDİL KUŞ
15	Course Lecturers:	Doç.Dr. Yahya IŞIK,Öğr.Gör. Zafer YILDIZ
16	Contact information of the Course Coordinator:	yildizzfr@uludag.edu.tr
17	Website:	
18	Objective of the Course:	Be able to dimension by drawing 2D (two dimensional) mechanical drawings and assembly drawings using CAD program, to use ready to use forms-objects to design 3D (three dimensional) modelling on the CAD program, to print.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Be able to establish CAD program.
	2	Be able to use CAD program and record files for CAM –CNC machine tools.
	3	Create shapes using CAD commands
	4	Be able to draw 2D engineering drawings and assembly drawings on CAD program.
	5	Be able to dimension 2D engineering drawings and assembly drawings on CAD program.
	6	Be able to insert ready-made shapes and symbols on 2D engineering drawings and assembly drawings on CAD program.
	7	Be able to print-plot of the drawings on CAD program
	8	Be able to make 3D modeling and surface modeling on CAD program.
	9	Be able to make material designation and render 3D drawings on CAD program.
	10	Be able to make the calculations of the area-volume centroid on CAD program.
21	Course Content:	

Course Content:

Week	Theoretical	Practice

1	The concept and the advantages of CAD, The introduction and use of CAD program screen and interface, saving of CAD files.	The use of CAD program
2	Settings of screen, linetype, layer,toolbox,,coordinate systems on CAD-CAM.	Creating a layer, making measured drawing
3	Draw commands (line,multilne,spline,pline,rectangle,polygon,ellipse,circle,arc, divide,measure,donut,region,hatch).	Measured drawing applications using draw commands.
4	Text ,Text style,text edit commands.	Measured drawing applications using draw commands.
5	Modify -editing commands (properties,erase,copy,explode,mirror,rotate,offset, move scale,array,trim,extend,fillet,chamfer,break,strecth).	Measured drawing applications using draw- modify commands.
6	Dimension commands and dimensioning on the drawing, 2D(two-dimensional) drawing applications.	Measured drawing applications using draw- modify- dimension commands.
7	Print-plot commands and plotting, be able to use blocks, creating blocks and to insert blocks on the drawing.	Drawing machine parts ,dimensioning, inserting surface finish –shape and position tolerance and print –plotting applications
8	Repetition of the course	Repetition of the course and practice exam on the computer and CAD program.
9	Analysis commands (id point,list,dist,area,	Measuring using analysis commands area measurement ,

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical commands.	14	3.00	42.00
Practicals/Labs	14	1.00	14.00
Self study and preperation changes on solid models using 3D operation	10	2.00	20.00
Homeworks	1	20.00	20.00
Projects Material assignment to solids models , rendering operations.	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams solid modeling.	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	15.00	15.00
Total Work Load			121.00
Total work load/ 30 hr	CAD programs.		4.03
ECTS Credit of the Course			4.00
		Students will practice on the computer and CAD program.	

23	Assesment

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	30.00
Quiz	0	0.00
Home work-project	1	10.00
Final Exam	1	60.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade	40.00	

Contribution of Final Exam to Success Grade	60.00	
Total	100.00	
Measurement and Evaluation Techniques Used in the Course		

24	ECTS / WORK LOAD TABLE

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0
ÖK3	5	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0
ÖK4	5	0	0	0	0	0	0	3	0	3	0	2	0	0	0	0
ÖK5	5	0	0	0	0	0	0	3	0	3	0	2	0	0	0	0
ÖK6	5	0	0	0	0	0	0	3	0	0	0	2	0	0	0	0
ÖK7	5	0	0	0	0	0	0	0	0	3	0	2	0	0	0	0
ÖK8	5	0	4	0	0	0	0	3	0	0	0	2	0	0	0	0
ÖK9	5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
ÖK10	5	0	0	0	0	0	3	3	0	0	0	2	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High