MACHINE DRAWING

1	Course Title:	MACHINE DRAWING
2	Course Code:	MKNZ102
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	Basic technical drawing
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr.Gör. ZAFER YILDIZ
15	Course Lecturers:	Öğr.Gör.Zafer YILDIZ, Öğr.Gör.Rasim KADERLİ
16	Contact information of the Course Coordinator:	yildizzfr@uludag.edu.tr
17	Website:	
18	Objective of the Course:	Knowing the machine elements and methods of combining used in manufacturing sector; be able to select ready machine elements from standarts and tto read and draw combining –assembly –part manufacturing drawings.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Be able to read assembly drawings
	2	Be able to make interpret the operation mechanism's and assembly ; by looking at the assembly drawing
	3	Be able to recognize the machine elements
	4	Be able to draw merge drawings using screw and removable assembly machine elements
	5	Be able to look at the size of machine elements from standards.
	6	Be able to select bearing according to its location from bearing catalogue
	7	Be able draw gear manufacture drawings by making gear calculations
	8	Be able to draw Assembly drawings of simple systems , edit lists of numbers-piece assembly.
	9	Be able to draw sketch by taking a measure on the machine parts .
	10	
21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Grouping of machine elements, screw joints made with mechanical fasteners	
2	Pin-bolt-wedge joints.	

3	Welded joints , welding symbols	
4	Bearing and types , bearing selection from bearing catalogue	
5	Belt –pulley systems , types. Gear wheels and types. Calculations of spur gear	
6	Helical gear, bevel gear and types. Calculations for helical gear, bevel gear	
7	Calculations for worm gear	
8	Repetition of the course	
9	Assembly drawings , types , numbering system	
10	Drawing of assembly drawing, giving the numbers of assembly drawing.)	
11	Drawing of assembly drawing	
12	Drawing of manufacturing drawing by using assembly drawing	
13	Drawing of manufacturing drawing by using assembly drawing	
14	Purpose of using sketch pictures and drawing methods.	

22	Textbooks, References and/or Other Materials:	Technical Drawing - Mechanical Drawing İ.Zeki ŞEN-Nail ÖZÇİLİNGİR

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and learning activities	10	1.00	10.00
Homeworks	15	2.00	30.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	15.00	15.00
Total Work Load			103.00
Total work load/ 30 hr			3.10
ECTS Credit of the Course			3.00

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	30.00
Quiz	0	0.00
Home work-project	15	10.00
Final Exam	1	60.00
Total	17	100.00
Contribution of Term (Year) Learning Activities to		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	5	0	0	0	0	2	0	4	0	3	0	0	0	0	0	0
ÖK2	5	0	0	0	0	0	0	3	0	3	0	3	0	0	0	0

ÖK3	5	0	0	0	0	3	5	0	0	2	0	0	0	0	0	0
ÖK4	5	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
ÖK5	5	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
ÖK6	5	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
ÖK7	5	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
ÖK8	5	0	0	0	3	0	0	0	0	5	0	0	0	0	0	0
ÖK9	5	0	0	0	0	0	0	0	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