

#### AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Mechanical Drawing								
Course Code		MKE154		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit	3	Workload	75 (Hours)	Theory		2	Practice	2	Laboratory	0
Objectives of the Course		It is aimed to gain proficiency in drawing using AutoCAD and reading technical drawings.								
Course Content		Geometric Drawings, Projection and Appearance Extraction, Measuring, Sections, Perspective Drawings, Drawing of Standard Machine Elements.								
Work Placement		N/A								
Planned Learning Activities and Teaching Methods		Methods	Explana	ation (	(Presentati	ion), Demonst	tration, Individ	dual Study		
Name of Lecturer(s)		Ins. Murat ÖZ	TÜRK							

#### **Assessment Methods and Criteria**

Method	Quantity	Percentage (%)	
Midterm Examination	1	40	
Final Examination	1	70	

## **Recommended or Required Reading**

1 Machine Image, İbrahim Zeki ŞEN, Nail ÖZÇİLİNGİR

Week	Weekly Detailed Cour	Course Contents					
1	Theoretical	Mechanical part connecting - demountable joints (bolted joints, connection pins, feather keys, parallel keys, prismatic connections, tolerance joints, fixed type bushings)					
2	Theoretical	Mechanical part connecting - fixed connections (riveted, welded, soldered and glued connections)					
3	Theoretical	Safety fasteners					
4	Theoretical	Motion Elements					
5	Theoretical	Power Transmission Elements					
6	Theoretical	Assembly image and detail image concepts					
7	Theoretical	Assembly and detail drawing					
8	Theoretical	Assembly and assembly sequence					
9	Intermediate Exam	MIDTERM					
10	Theoretical	Assembly painting and detail painting applications					
11	Theoretical	Assembly painting and detail painting applications					
12	Theoretical	Assembly painting and detail painting applications					
13	Theoretical	Assembly painting and detail painting applications					
14	Theoretical	Mounting and detailing booklets					
15	Theoretical	Draw a sketch					
16	Final Exam	FINAL EXAM					

## **Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload	
Lecture - Theory	14	0	2	28	
Lecture - Practice	14	0	2	28	
Assignment	4	0	1	4	
Project	3	0	1	3	
Midterm Examination	1	5	1	6	
Final Examination	1	5	1	6	
	75				
	3				
25 hour workload is accepted as 1 ECTS					



	C	ourse Information For
Learn	ning Outcomes	
1	To be able to draw technical drawings of standard machine elements	
2	To understand the drawings of machine,	
3	Understanding the standard representation of machine elements,	
4	Detachable and can not be disassembled to draw connections,	
5	Original size to draw machine parts assembly and disassembly,	

# Programme Outcomes (Machinery)

1	To be able to know general properties and usage areas of industrial materials and make selection.
2	Design of machine elements.
3	To be able to make production using machining and welding machines without machining.
4	To be able to make measurement and quality control processes with machine tools for measuring and control equipment.
5	To be able to make necessary corrections in order to determine the mistakes by using the necessary non-destructive test methods in welded parts and to eliminate these mistakes.
6	Preventive measures to prevent the occurrence of these faults by preliminarily determining the faults that will occur in the machines as statistical data and to make necessary interventions in case of breakdown.
7	They can make drawings of work pieces on CAD station and apply them on CNC looms. Ability to operate and use CAD / CAM and AUTOCAD package programs.
8	To be able to transfer engineering science and technology to practice by making calculations in the direction of scientific principles.
9	It can repair the elements in pneumatic and hydraulic systems which are indispensable elements of automatic control systems and can regulate their work.
10	The student who is trained as a machine technician during the whole program knows that industrial task definition in the field of work is error finding, problem solving, decision making, planning of functions and activities and they can be achieved by aiming to acquire these characteristics.

## Contribution of Learning Outcomes to Programme Outcomes 1: Very Low, 2: Low, 3: Medium, 4: High, 5: Very High

	L1	L2	L3	L4	L5
P1	4	5	5	3	3
P2	4	3	4	4	4
P3	5	4	5	5	5
P4	5	3	4	3	3
P5	2	2	5	4	4
P6	5	4	4	4	5
P7	4	5	5	3	3
P8	3	5	5	2	4
P9	5	4	3	5	5
P10	5	5	4	4	3