



**AYDIN ADNAN MENDERES UNIVERSITY**  
**AYDIN VOCATIONAL SCHOOL**  
**MECHANICAL AND METAL TECHNOLOGY**  
**MACHINERY**  
**COURSE INFORMATION FORM**

Course Title	Mechanical Drawing								
Course Code	MKE154			Course 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	Explanation (Presentation), Demonstration, Individual Study								
Name of Lecturer(s)	Ins. Murat ÖZTÜRK								

#### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	30
Final Examination	1	70

#### Recommended or Required Reading

1	Machine Image, İbrahim Zeki ŞEN, Nail ÖZÇİLİNGİR
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Week	Weekly Detailed 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
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

\*25 hour workload is accepted as 1 ECTS



**Learning 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.

