



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Machine Elements							
Course Code		OTE209		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		This course, aims to make the calculations for the basic concepts of machine elements.							
Course Content		Calculation of the basic concepts of machine elements							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Individual Study, Problem Solving					
Name of Lecturer(s)		Lec. Hasan BAYRAKTAR							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	1. Makine Elemanları
2	Cisimlerin Dayanımı-Dursun Erkal-MEB

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic Concepts
2	Theoretical	Fasteners
3	Theoretical	Soldering, welding, shaft-hub connections
4	Theoretical	Retainer, Tapered Plug, Pin
5	Theoretical	Tolerances, Surface Quality Rivets and Accounts
6	Theoretical	Wedges Bolts and Studs
7	Theoretical	Gear and Accounts
8	Theoretical	Belts and Pulleys
9	Theoretical	Concepts Torque, Torque gear Boxes
10	Theoretical	Bows mechanisms Chains
11	Theoretical	Pulleys and Ropes
12	Theoretical	Shafts and Shaft Accounts
13	Theoretical	Axles
14	Theoretical	beds
15	Theoretical	Beds

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	0	2	30
Assignment	5	0	2	10
Term Project	4	0	2	8
Midterm Examination	1	0	1	1



Final Examination	1	0	1	1
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Be able to calculate the machine elements.
2	able to do resistance elements merge accounts, tensile, compression, shear and torsion strength calculations according to the technique
3	will be able to withstand the accounts in Gears, belts, pulleys and clutches accounts, shafts, bearings and chains accordance with the technique.
4	Learning and applying the wear and lubrication properties of the beds
5	Bearing types and functions to understand and apply in practice

Programme Outcomes (Mechatronics)

1	TECHNICAL FOREIGN LANGUAGE
2	BASICS OF MECHATRONICS
3	TECHNICAL DRAWING
4	DOING BASIC MECHANIC PROSESES
5	CHOOSE THE MATERIALS
6	DOING MECHANICAL SYSTEM DESIGN
7	SET UP A HYDRAULIC OR PNEUMATIC SYSTEMS
8	DOING COMPUTER AIDED MECHANICAL DESIGN
9	USING FLEXIBLE PRODUCING SYSTEMS
10	USING COMPUTER AIDED MACHINE TOOLS
11	DOING ELECTRICAL AND ELECTRONICAL
12	SET UP ELECTRICAL AND ELECTRONICAL CIRCUITS
13	SET UP LOGICAL CIRCUITS
14	DOING COMPUTER AIDED ELECTRONICAL CIRCUITS DESIGN
15	SET UP ELECTRICAL MOTORS
16	SET UP MICROCONTROLLER CIRCUITS
17	SET UP CONTROL SYSTEMS
18	COMMUNICATE CONTROL SYSTEMS
19	DOING INDUSTRIAL ROBOTIC PROGRAMMING AND MAINTENANCE
20	WRITING COMPUTER PROGRAMME
21	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
22	Ability to plan a career in their own profession.

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

	L1	L2	L3	L4	L5
P4	5	5	5	5	5
P5	5	5	5	5	5

