



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 (Automotive Technology)

1	Using the basic knowledge and skills acquired in his/her field of study, to have the ability to evaluate and interpret the data, to define and analyze the problems, to make solution suggestions based on evidence and proofs.
2	To choose and use efficiently contemporary techniques and means as well as information technologies required for the applications related to the field of study.
3	The ability to apply the processes related to industrial and service sector by examining.
4	To gain the ability to produce solutions to unforeseen situations, take responsibility in teams and to have the skill to conduct individual works.
5	To achieve an awareness of the necessity of lifelong learning and consistently self-improving besides of following the developments in science and technology.
6	To become skillful at using computer hardware and software in a baseline level required by the field of study.
7	To be aware of Business Law, Job Security, environmental protection and quality concepts.
8	To have a command of communication skills and foreign language in order to communicate efficiently and follow the latest developments in his/her field of study.
9	Acquiring enough conceptual and applied knowledge in Mathematics, Science and Basic Engineering issues related to his/her field.
10	To plan the processes in automotive technology field to meet the expectations of the sector.
11	To become skillful at making designs by means of technical and computer-aided drawings and simulation programs, and by using various software programs to be able to choose systems and components required in by the field apart from making the basic sizing computations and drawing the architectural and static projects and details.
12	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
13	To provide them with knowledge about substance use and addiction problem and prevention methods.

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	5	5	5	5	5
P2	4	4	4	3	4
P3	4	4	4	4	5
P4	5	5	5	5	5
P5	3	3	3	3	3
P6	3	4	4	4	4
P7		3	3	3	3
P9	3	3	3	3	3
P10	2	2	2	2	2
P11	4	4	4	2	2

