

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Motion Control Systems							
Course Code		OTE205		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	100 <i>(Hours)</i>	Theory	3	Practice	1	Laboratory	0
Objectives of the Course		In this course, it is aimed to repair and do the maintenance of Motion control systems.							
Course Content		Pre-Order, tires, brake systems, steering systems, shock absorbers,							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods E				Explanation (Presentation), Demonstration, Individual Study					
Name of Lecturer(s)		Ins. Etem SAQ	ÇMACIOĞLU						

Assessment Methods and Criteria

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

Recommended or Required Reading

1 1. Hareket Kontrol Sistemleri Megep Yayınları, İnternet

Week	Weekly Detailed Course Contents				
1	Theoretical	Front Wheel Settings			
2	Theoretical	Steering Systems and Types			
3	Theoretical	Shock Absorbers			
4	Theoretical	Hydraulic Brake Systems			
5	Theoretical	braking Limiter			
6	Theoretical	Air Brake Systems			
7	Theoretical	Retarder System			
8	Theoretical	ABS Brake System			
9	Theoretical	Sensors used in ABS Brake System			
10	Theoretical	diagnostic Tool			
11	Theoretical	ASR Brake System			
12	Theoretical	ESP Brake System			
13	Theoretical	ASR Brake System Sensors are used in			
14	Theoretical	EBD Brake System, Brake Systems Comparison			
15	Theoretical	EBD Brake System, Brake Systems Comparison			

Workload Calculation

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Activity	Quantity	Preparation	Duration	Total Workload		
Lecture - Theory	15	0	3	45		
Lecture - Practice	15	0	1	15		
Studio Work	8	0	3	24		
Individual Work	1	0	14	14		
Midterm Examination	1	0	1	1		
Final Examination	1	0	1	1		
	100					
	4					
*25 hour workload is accepted as 1 ECTS						

Learning Outcomes

- 1 will be able to maintain and repair vehicles used in the pre-order, steering and suspension systems.
- 2 will be able to do the maintenance and repair Hydraulic brake system used in vehicles, hidrovak and connections, of brake pipes.



3	will be able to repair Motion control systems and do its maintenance
4	Basic tasks of the vehicles chassis and superstructures, the importance of different structures and properties of the chassis to comprehend
5	To know the different suspension systems. Suspension equipment suspension systems with different structural features of the bonds and be able to comprehend. Bellows, power assisted systems to recognize and understand the uses and purposes. Recognize and understand the working principles of electronically controlled suspension systems.
Progra	amme 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.

- 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	4	4	4	4	3
P2	5	5	5	5	4
P3	4	4	4	4	3
P4	3	3	3	3	3
P5	3	3	3	3	4
P6	4	4	4	4	4
P9	3	3	3	3	4
P10	3	3	3	3	
P11	4	4	4	4	4

