AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Engine Technlogy								
Course Code	OTE156		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	3	Practice	1	Laboratory	0
Objectives of the Course	Be able to do the repair and maintenance of all components on the vehicle's engine.								
Course Content	Measuring instruments, engine terms, Two and Four Stroke motor cycles, Otto Cycle, Diesel Cycle, motors Measurement and Control, Valves, Sente and Cylinder Head, Valve Mechanism, Piston Crank Mechanism, Piston rings, crankshaft and camshafts, Time Setting Mechanisms, Variable Valve Timing, Variable Valve Timing, Engine Block, Lubrication System, Cooling System								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Individual Study								
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	Motorlu Taşıt Tekniği-Wilfried Staudt MEB 1995
2	Honda Eğitim Merkezi Katologları

Week	Weekly Detailed Course Contents	
1	Theoretical	Measuring instruments, Engine terms
2	Theoretical	Two and Four Stroke motor Cycles, Cycles Otto, Diesel Conversions
3	Theoretical	Engines, Measurement and Control
4	Theoretical	Valves, Sente and Cylinder Head
5	Theoretical	Valve Mechanism
6	Theoretical	Piston Crank Mechanism
7	Theoretical	Rings
8	Theoretical	The crankshaft and camshafts
9	Theoretical	Time Adjustment Mechanisms
10	Theoretical	Variable Valve Timing
11	Theoretical	Variable Valve Timing
12	Theoretical	Engine Blocks
13	Theoretical	Lubrication System
14	Theoretical	Cooling System
15	Theoretical	Cooling System

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	0	3	45
Lecture - Practice	15	1	1	30
Assignment	8	0	2	16
Laboratory	8	0	1	8
Midterm Examination	1	0	1	1

Final Examination	1	0	0	0
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	will be able to document the synthesis of basic mechanical operations.
2	be able to repair and control the cylinder head and piston-crank mechanism
3	to control and may change time adjustment mechanisms, and variable valve timing mechanism.
4	Be able to repair and maintain the cooling system and engine lubrication system.
5	To understand the engine disassembly and assembly techniques, failure on the search, to learn the methods of removal

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	4	3	3	3	5
P2	4	3	3	3	5
P3	4	2	2	2	3
P4	3	4	4	4	4
P5	1	1	1	1	3
P6	3	3	3	3	4
P7	1	2	2	2	3
P9		3	3	3	2
P10	2	2	2	2	2
P11					3