



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

Course Title	Introduction to Automotive Information								
Course Code	OTT182			Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	In this lesson the student is aimed to have basic knowledge about the automotive sector by transferring the theoretical knowledge of the student, the working principle of all the evenings on the motor vehicle, the preliminary order of the car, the tire, the power transmission system and other auxiliary equipment in general.								
Course Content	Engine Terminals, Two and Four Timed Motor Cycles, Otto Cycles, Diesel Cycles, Measuring and Control in Engines, Valves, Cover and Roller Cover, Valve Mechanisms, Piston Actuator Mechanics, Segments, Crankshaft and Camshafts, Engine Blocks, Lubrication System, Cooling System, Fuel System, Motion Control Systems, Power Transmission Organs, Automobile Manufacturing Technology, Vehicle Purchase Considerations								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion								
Name of Lecturer(s)	Lec. Ahmet Fatih HACIYUSUFOĞLU								

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Megep Motor Technology 1
2	Megep Motor Technology 2
3	Megep Motor Technology 3
4	Megep Motor Technology 4

Week	Weekly Detailed Course Contents	
1	Theoretical	Engine terms
2	Theoretical	Two and Four Stroke Motor Cycles, Otto Cycle, Diesel Cycle of
3	Theoretical	Valves, Senter and Cylinder Head, valve mechanisms, piston connecting rod mechanism, Piston Rings, crankshaft and camshafts
4	Theoretical	Time Setting Mechanism, Variable Valve Timing
5	Theoretical	Lubricating System, Cooling System
6	Theoretical	Fuel System
7	Theoretical	Motion Control Systems
8	Theoretical	Motion Control Systems
9	Intermediate Exam	Midterm
10	Theoretical	Tire Selection and Care
11	Theoretical	Automobile Manufacturing Technology
12	Theoretical	Automobile Manufacturing Technology
13	Theoretical	New Developments in Automotive
14	Theoretical	Car Buying tips What to pay attention
15	Theoretical	Car Buying tips What to pay attention
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	10	0	1	10
Midterm Examination	1	5	1	6



Final Examination	1	5	1	6
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	They will learn motor cycles, diesel and otto cycles theoretically.
2	They will know the parts of a motor and what it does.
3	The motorda will theoretically acquire the characteristics of auxiliary equipment and motion control systems.
4	They will know what to watch out for when buying a car.
5	Students will have knowledge about automobile manufacturing technologies.

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.

