AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Power Transmission System								
Course Code	OTT203		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	3	Practice	1	Laboratory	0
Objectives of the Course	To understand the working principles, failures, variations and care of the transmission organs.								
Course Content	In this course students; learn to control and adjust the clutches, gearbox, shaft, differential and axles that make up the powertrain of the vehicle.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Problem Solving								
Name of Lecturer(s)	Ins. Erdoğan PİRELİ								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Crouse, W. H., Automotive Chassis and Body.
2	Beton A., Power Transmission Bodies in Motor Vehicles.
3	Power Transmission Bodies / Megep Lecture Notes

Week	Weekly Detailed Course Contents	
1	Theoretical	Concepts, Operating Systems and Coupling Separation Systems
2	Theoretical	Concepts, Operating Systems and Coupling Separation Systems
3	Theoretical	Hydraulic Clutch Center
4	Theoretical	Front-Drive Gearboxes
5	Theoretical	Basic Terms and Concepts in Mechanical Gearboxes
6	Theoretical	Mechanical Gearbox
7	Theoretical	Hydraulic Power Transmission, Torque Converter
8	Theoretical	Hydraulic Power Transmission, Torque Converter
9	Intermediate Exam	Midterm
10	Theoretical	Planetary Gear Systems of Automatic Gearbox
11	Theoretical	Variable Geometry Gearbox (Cvt) Pulley, Belt-Chain System
12	Theoretical	Variable Geometry Gearbox (Cvt) Pulley, Belt-Chain System
13	Theoretical	Automatic Gearbox Hydraulic System Automatic Gearbox Electronic System and Management
14	Theoretical	Control Systems for Tiptronic Gearbox
15	Theoretical	Shafts, Differentials, Locked Differentials, Axles
16	Final Exam	Semester final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Lecture - Practice	14	0	1	14
Reading	15	0	2	30
Quiz	1	0	2	2
Midterm Examination	1	5	1	6

Final Examination	1	5	1	6
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Students who take this course learn about the system of power transmission organs.
2	It performs the control, maintenance and repair of power transmission organs
3	To be able to compare motor characteristics with vehicle characteristics and to interpret the need for transmission systems. To be able to comment on the power conditions of the powertrain.
4	Couplings and clutch characteristics, mechanical clutch and magnetic clutch, hydraulic clutches and characteristics. To understand the torque converter and use purposes, can analyze the kinetics
5	To learn gearboxes and types. Know the gear ratios and analyze gear shift diagrams. Learns synchromancer assemblies and gear mechanisms

Programme Outcomes *(Automotive Technology)*	
1	To be able to interpret and evaluate data, identify problems, analyze them, and develop evidence-based solutions by using basic knowledge and skills in the field.
2	Must be able to choose and effectively use the modern techniques, tools and information technologies necessary for field related applications.
3	Must be able to gain practical skills by examining relevant processes in industry and service sector on site.
4	They must be able to produce solutions, take responsibility for teams or do individual work when they encounter situations unforeseen in the field related applications.
5	Awareness of the need for lifelong learning; it must be able to follow the developments in science and technology and to constantly renew itself.
6	Must be able to use computer software and hardware at the basic level required by the field
7	Must have job security, worker health, environmental protection knowledge and quality awareness.
8	He must possess a level of foreign language knowledge that is capable of following the innovations in his area of expertise and communication techniques.
9	Must be able to acquire basic theoretical and practical knowledge about the field in mathematics, science and basic engineering.
10	It should have the ability to plan the processes / processes of the Automotive Program to meet the expectations of the sector.
11	To be able to design the systems and components related to the field by using technical drawing, computer aided drawing, designing using simulation programs and using various softwares, to be able to make basic sizing calculations, to be able to master professional plans and projects.

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	4	5	4
P2	5	5	5	5	4
P3	5	5	4	5	5
P4	4	4	5	4	4
P5	2	2	3	4	
P7	4	4	3	4	4
P8	1	1	2	5	4
P10	5	5	4	4	4
P11		3	4	5	4