AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Construction Machinery Technology						
Course Code	OTT251		Couse Level	Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to acquire necessary knowledge about the management and supervision of the power source, power transmission organs, steering and control organs related to construction machinery.						
Course Content	In this lesson students learn about the types of work machines, what purpose they are used for and the machine tools and working principles.						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study						
Name of Lecturer(s)	Lec. Ahmet Fatih HACIYUSUFOĞLU						

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Erdoğan, D., Acar, A.İ. and A. Colak, 2001. Melioration Machines. Ankara University Faculty of Agriculture Publications: 1519, Textbook: 472, 236 pp., Ankara.
2	Anonymous, magazines, magazines and CD's about work machines.

Week	Weekly Detailed Course Contents	
1	Theoretical	Working with business objectives and important features of the machinesHistory and general characteristics of construction equipment
2	Theoretical	The classification of construction equipment, the selection of construction equipment, engines used in construction machinery and driveline
3	Theoretical	Ripper and general characteristics, classification and mechanical properties of the Ripper, operating characteristics and business performance of the Ripper, Dozers and general characteristics, classification and mechanical properties of Dozers
4	Theoretical	Operating characteristics and business performance of Dozers, Scrapers and general characteristics, classification and mechanical properties Scrapers
5	Theoretical	Graders, general characteristics, classification and mechanical properties, operating characteristics and business performance of Graders
6	Theoretical	Excavators and general characteristics, beware, definition, cycle, operating characteristics and business efficiency, Dreglayn definition, cycle, operating characteristics and business efficiency
7	Theoretical	Klemşel definition, cycle, operating characteristics and business efficiency, backhoe by definition, cycle, operating characteristics and business efficiency, cranes and general features
8	Theoretical	General characteristics of Trenchers Built, endless chain trencher, Rotary paddle trench machine-midterm)
9	Intermediate Exam	Cost elements in business machinery and equipment
10	Theoretical	Trençles, Dicer, mole drain plow
11	Theoretical	General characteristics of the installer, the classification of the installer, operating characteristics and business performance of the loader, backhoe loaders for tractors
12	Theoretical	General characteristics and classification of soil compaction machines, static compactors, flat cylinders, goat-footed roller, rubber-wheeled rollers, Pulse compressors, beaters, Vibrators
13	Theoretical	Light leveling machines, long chassis toppers, short chassis toppers, sliding support leveling shovel, shovel Leveling, rock pickers, barrel making machines, stone crushing machines
14	Theoretical	The equipment used for the removal of tree stumps, material transport, operating characteristics and business efficiency

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Quiz	2	0	10	20

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	To be able to make evaluations, to make estimations and to make decisions about the business success, job creation and other business parameters of business machines.
2	To have theoretical knowledge about the management and control of the power sources, transmission, walking, steering and control systems of various business machines.
3	Student graders, general characteristics, classifications and mechanical properties, understand the operation characteristics of graders and business efficiency
4	Student excavators, general characteristics, classifications and mechanical properties, excavator operating characteristics and business efficiency comprehend
5	Student understands the general properties and types of ground compaction machines

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
P1	4	4
P2	4	4
P3	1	1
P4	3	3
P5	2	2
P7	4	4
P8	1	1
P9	4	4
P10	4	4
P11	1	1