

HEAVY CONSTRUCTION MACHINES

1	Course Title:	HEAVY CONSTRUCTION MACHINES
2	Course Code:	OTO4031
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	4
6	Semester:	7
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. M.İHSAN KARAMANGİL
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	E-posta : ihsan@uludag.edu.tr T: +90 224 2941978 Uludağ Üniversitesi Mühendislik Mimarlık Fakültesi Otomotiv Mühendisliği Bölümü Görükle Kampusu Bursa 16059
17	Website:	
18	Objective of the Course:	Aim of this course is to gain basic information about duty machines types, application areas and maintenance.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Learning the duty machines types and application areas
	2	Recognition of the auxiliary equipment and systems special for duty machines.
	3	Operations of duty machines maintenance.
	4	Learning the differentiated spots from classical vehicle.
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Introduction to duty machines.	
2	Duty machines types, application areas and characteristics	
3	Work site and land machines.	

4	Crawler duty machine.	
5	Wheeled duty machines and drive systems.	
6	Tower crane duty machine.	
7	Tractor and grayders.	
8	Asphalt and work site machines.	
9	Midterm exam.	
10	Excavator and scrapper digging machines	
11	Rock drilling machines.	
12	Maintenance on duty machines.	
13	Maintenance on duty machines.	
14	Safety and security precautions.	

22	Textbooks, References and/or Other Materials:	1. Lecture notes, Mahmut düz.
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23	Assesment	
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	25.00
Quiz	0	0.00
Home work-project	2	15.00
Final Exam	1	60.00
Total	4	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

24	ECTS / WORK LOAD TABLE	
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Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	1	25.00	25.00
Homeworks	2	25.00	50.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	25.00	25.00
Others	0	0.00	0.00
Final Exams	1	8.00	8.00
Total Work Load			150.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			5.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	1	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			