HYDRAULIC PNEUMATIC

1	Course Title:	HYDRAULIC PNEUMATIC
2	Course Code:	MKNZ206
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	2
6	Semester:	4
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	2
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr.Gör. RASIM KADERLİ
15	Course Lecturers:	Öğr. Gör. Rasim Kaderli
16	Contact information of the Course Coordinator:	Öğr.Gör. Rasim KADERLİ Teknik Bil. M.Y.O Makine Prog. tlf.224 2942375
17	Website:	
18	Objective of the Course:	Mechanical technicians with the basic concepts of fluid mechanics is necessary for hydrostatic and hydrodynamic principles kavrıyabilme and working principles of hydraulic and pneumatic control systems and control systems and circuits kavrıyabilme edit. Given craters establish appropriate hydraulic pneumatic circuits.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	

	1	To understand the basic principles of hydraulics
	2	Hydraulic components and circuitry recognition
	3	Pumps and kavrıyabilme recognition.
	4	Concept and types of motors and Valves
	5	Direction Control Valve, recognition and comprehension
	6	Flow control functions of the clutch vafllerinin
	7	Pressure control functions of the clutch vaflerinin
	8	Pneumatic valves, pneumatic circuits, and recognition and comprehension
	9	
	10	

21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Basic principles of hydraulics	The problem with solutions Fluids
2	Hydraulic components and circuitry	Hydraulic circuit components introduce symbols
3	Pumps	Pumps and related applications
4	Cylinders	Applications of cylinders

5	Motors	Motors-related applications
6	Valves and variations	Valves and types of recognition
7	Directional control valves	Directional control valves functions of the clutch
8	Midterm Exam	
9	Flow control vaflleri	Understanding the function of the circuit flow control valves
10	Pressure control vafleri	Pressure control valves in the circuit function, grip
11	Pneumatic components	Pneumatic clutch and mathematical calculations to make the working principles of sistemlerinmin.
12	Pneumatic circuits	Pneumatic circuit design to make
13	Pneumatic motors and cylinders	Pneumatic motors and cylinders in the circuit grip işlemlarini
14	Pneumatic valves	Pneumatic and electro-pneumatic valves and clutch symbols.

22	Textbooks, References and/or Other Materials:	
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	20.00
Quiz	0	0.00
Home work-project	1	20.00
Final Exam		60.00

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical			
Contribution of Final Exam to Success Grade	60.00		
Practicals/Labs			
Total	100.00		
Self study and preperation			
Homeworks			
Projects			

24 ECTS / WORK LOAD TABLE

Field Studies			
Midterm exams			
Others			
Final Exams			
Total Work Load			
Total work load/ 30 hr			
ECTS Credit of the Course			4.00

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ÖK5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	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