HYDROULIC PNOUMATIC

1	Course Title:	HYDROULIC PNOUMATIC	
2	Course Code:	EKLS210	
3	Type of Course:	Optional	
4	Level of Course:	Short Cycle	
5	Year of Study:	2	
6	Semester:	4	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Öğr. Gör. Rasim KADERLİ	
15	Course Lecturers:	Meslek Yüksekokulları Yönetim Kurullarının görevlendirdiği öğretim elemanları.	
16	Contact information of the Course Coordinator:	Öğr.Gör. Rasim KADERLİ rkaderli@uludag.edu.tr Teknik Bil. M.Y.O Makine Prog. Tlf.224 2942375	
17	Website:		
18	Objective of the Course:	To understand the working principles of hydraulic and pneumatic control systems, these control systems circuit edit and establish a hydraulic circuit in accordance with the criteria.	
19	Contribution of the Course to Professional Development:	Learning hydraulic-pneumatic systems.	
20	Learning Outcomes:		
		1	Explains basic hydraulic principles and solve numerical problems.
		2	Explains the elements and functions of hydraulic circuit.
		3	Draws the symbols of hydraulic circuit components and circuits establishes.
		4	Remembers the failures and maintenance methods in hydraulic circuit elements.
		5	Analyses ways to provide hydraulic circuit elements and criteria in order.
		6	Explains basic pneumatic principles and solve numerical problems.
		7	Explains the elements and functions of pneumatic circuit.
		8	Draws the symbols of pneumatic circuit components and circuits establishes.
		9	Remembers the failures and maintenance methods in pneumatic circuit elements.
		10	Analyses ways to provide pneumatic circuit elements and criteria in order.
21	Course Content:		
	Course Content:		
Week	Theoretical	Practice	

1	Lessons to inform and identifying hydraulic circuit elements.	
2	Creating hydraulic circuit diagram	
3	Detecting failures in hydraulic systems	
4	Troubleshooting hydraulic failure	
5	Identifying pneumatic circuit elements	
6	Creating pneumatic circuit diagram	
7	Creating electro pneumatic systems	
8	Creating electro pneumatic systems	
9	Repeating courses	
10	Detecting failures in pneumatic systems	
11	Troubleshooting pneumatic failure	
12	To make periodic checks of systems	
13	To make periodic maintenance of systems	
14	Fault detection and repairing the defective machine	

22	Textbooks, References and/or Other Materials:	1- Michael J.P. ve Ashby J.G. Güç Hidroliği, 1994. 2- Küçük M. Hidrolik ve Pnömatik, 2003.
23	Assesment	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	13	2.00	26.00
Homeworks	0	0.00	0.00
Projects	1	10.00	10.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	15.00	15.00
Total Work Load			99.00
Total work load/ 30 hr			2.97
ECTS Credit of the Course			3.00

Measurement and Evaluation Techniques Used in the Course	To enable the students to put into practice the theoretical knowledge they have obtained about the profession they workplace and to gain expenence in addition to the theoretical knowledge.

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	5	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK3	4	0	0	0	0	5	0	0	0	0	0	4	0	0	0	0
ÖK4	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0

ÖK5	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK8	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK9	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK10	0	0	0	0	0	5	0	5	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**