AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Hyraulic and Pneumatic								
Course Code	OTE254		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit	5	Workload	125 *(Hours)*	Theory	3	Practice	1	Laboratory	0
Objectives of the Course	In this course, students learn the hydraulic-pneumatic circuit elements on the circuit systems, maintenance and repair of looms building .								
Course Content	Recognize the elements of the hydraulic circuit, hydraulic circuit diagram to create, Detecting faults in hydraulic systems, hydraulic malfunctions Troubleshooting ,Identify pneumatic circuit elements, creating pneumatic circuit diagram, electro-pneumatic systems, to create, to create electro-pneumatic systems, pneumatic systems to detect failures Troubleshooting Faults air, make periodic checks of systems Make periodic maintenance of the systems, making the detection of the fault, repair of the faulty machine.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Individual Study								
Name of Lecturer(s)	Ins. Cemal GÖVEN, Ins. İsmail MERSİNKAYA								

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

Recommended or Required Reading	
1	Hidrolik Akışkan Gücü-FAtih Özcan-Mert Eğitim Yayınları
2	Hidrolik-Pnömatik FESTO -Yayınları

Week	Weekly Detailed Course Contents	
1	Theoretical	Recognize the elements of the hydraulic circuit
2	Theoretical	Create Hydraulic Circuit Diagram
3	Theoretical	Detecting faults in hydraulic systems
4	Theoretical	Troubleshooting Power Failures
5	Theoretical	Identify pneumatic circuit elements
6	Theoretical	Create Pneumatic Circuit Diagram
7	Theoretical	Create electro-pneumatic systems
8	Theoretical	Create electro-pneumatic systems
9	Theoretical	Pneumatic systems to identify failures
10	Theoretical	Pneumatic Troubleshooting Faults
11	Theoretical	Systems to make periodic checks
12	Theoretical	Periodic maintenance of the systems do
13	Theoretical	Make Fault Detection
14	Theoretical	Repair of the Faulty machine
15	Theoretical	Repair of the Faulty machine

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	0	3	45
Lecture - Practice	15	0	1	15
Assignment	9	0	4	36
Studio Work	9	0	3	27
Midterm Examination	1	0	1	1

Final Examination	1	0	1	1
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Transactions related to hydraulic systems
2	Transactions related to pneumatic systems
3	Basic maintenance and repair of looms
4	To identify elements in drawn circuits and interpretation of running circuits
5	To be able to select elements for a new designed circuit and construct circuit

Programme Outcomes *(Electrics)*	
1	ABILITY TO MAKE APPLICATIONS OF MEASUREMENT AND CALCULATION
2	ABILITY TO MAKE CONNECTIONS OF A DC CIRCUIT
3	ABILITY TO MAKE BASIC ELECTRONIC CIRCUIT AND APPLICATIONS
4	ABILITY TO MAKE ELECTRIC INSTALLMENT APPLICATIONS
5	ADAPTING VOCATIONAL ETHICAL VALUES
6	ABILITY TO MAKE COMMUNICATION
7	ABILITY TO MAKE CONNECTIONS OF AC CIRCUIT
8	ABILITY TO MAKE NUMERICAL CIRCUITS
9	ABILITY TO MAKE INSTALLATIONS OF TRANSFORMER AND DC ELECTRIC MACHINES
10	ABILITY TO MAKE COMPUTER AIDED DESIGN
11	ABILITY TO APPLY VOCATIONAL TECHNICAL METHODS
12	ABILITY TO MAKE INSTALLATIONS OF AC ELECTRIC MACHINES
13	ABILITY TO MAKE SPECIAL ELECTRIC INSTALLMENTS
14	ABILITY TO MAKE INSTALLMENTS OF COMMAND SYSTEMS
15	ABILITY TO DRAW COMPUTER AIDED ELECTRIC SCHEME
16	ABILITY TO MAKE POWER ELECTRONICS CIRCUITS
17	ABILITY TO MAKE SYSTEM ANALYSIS AND PRODUCT DESIGN
18	ABILITY TO IMPROVE ONESELF UTILIZING INFORMATION OPPORTUNITIES
19	ABILITY TO DRAW COMPUTER AIDED ELECTRIC INSTALLMENT PROJECT
20	ABILITY TO MAKE ANALYSIS AND MAINTENANCE OF ELECTRICAL ENERGY PRODUCTION SYSTEMS
21	ABILITY TO MAKE THE WINDING OF ACCURATE AND ALTERNATIVE CURRENT ENGINES
22	ABILITY TO RECOGNIZE SYSTEMS USED IN ELECTRICAL ENERGY TRANSMISSION AND DISTRIBUTION AND TROUBLESHOOTING
23	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
24	Ability to plan a career in their own profession.
25	To provide them with knowledge about substance use and addiction problem and prevention methods.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P11	3	3	3	3	3
P14	5	5	5	4	5