



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Complementary Electricity Services and Systems							
Course Code		ELE270		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	1	Practice	1	Laboratory	0
Objectives of the Course		To understand the electrical service systems.							
Course Content		Water supply systems in buildings, heating systems in buildings, air regulation systems, lighting systems, fire alarm systems, lightning (lightning) systems, spare supply systems.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Project Based Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Textbook, sample projects
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Week	Weekly Detailed Course Contents	
1	Theoretical	Booster and submersible pump.
2	Practice	Selection and installation of hydrophore and submersible pump motors.
3	Theoretical	Control of submersible and submersible pumps
4	Theoretical	Heating systems
5	Theoretical	Electrical equipment in heating requests.
6	Theoretical	Air conditioning systems. Work and connections of elements in air conditioning systems
7	Theoretical	Electric motor in air conditioning systems.
8	Theoretical	Lighting systems
9	Theoretical	Fire alarm systems.
10	Theoretical	Fire alarm devices.
11	Theoretical	Working principles of fire alarm system
12	Theoretical	Working principles of fire alarm system
13	Theoretical	Lightning arrester systems
14	Theoretical	Redundant power supply systems

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Midterm Examination	1	8	1	9
Final Examination	1	8	2	10
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Understands the operation of water pump
2	Mounts the submersible and normal pump motors, makes the electricity supply. Finds, maintains and repairs faults.
3	Interpretation of heating systems projects and specifications.
4	Recognize the electrical equipment and control devices used in various heating systems. Electrical equipment finds fault and periodic maintenance.



5	Explains the functions of the basic elements of an air regulation system and makes electrical work and connections of these elements. Explain the features of the electric motor and auxiliary equipment used.
6	Explain the principles of interior lighting. It makes appropriate switching of lamps. Explain the features of lighting tools and auxiliary equipment.
7	Recognize and explain open and closed circuit fire alarm systems and draws the project.
8	Explain the formation of lightning and damages.

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	L6	L7	L8
P1	2							
P2	2	2						2
P3	2	3						2
P4	3							
P7	3	2		2				2
P9	3	2			4			
P11							4	3
P12	4	4			4			
P13	4	4		3			4	4
P14		5						
P15						4		
P17			4	3				
P18						4		
P20				3			4	3

