AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Alternative Current Curcuits						
Course Code	ELE108		Couse Level	Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	100 *(Hours)*	Theory	3	Practice	1	Laboratory	0
Objectives of the Course	In this course, it is aimed to have the students gain the abilities and knowledge like solution and calculations of circuit in AC.						
Course Content	Serial and parallel circuits in AC, resonance circuits, 1 and 3 phase systems, power and compensation calculations in AC						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Experiment, Demonstration, Problem Solving				
Name of Lecturer(s)	Ins. Serkan ARTAN, Ins. Zafer KORKMAZ						

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Alternative current circuits(Mustafa Yağımlı-Feyzi Akar)
2	A.A Circuit analyze(Murat Ceylan)

Week	Weekly Detailed Course Contents	
1	Theoretical	Resistor, coil and capacitor in alternating current
2	Theoretical	Resistor, coil and capacitor in alternating current
3	Theoretical	Serial circuits
4	Theoretical	Serial circuits
5	Theoretical	Parallel circuits
6	Theoretical	Parallel circuits
7	Theoretical	Resonance
8	Intermediate Exam	Midterm
9	Theoretical	Power and compensation in AC
10	Theoretical	Power and compensation in AC
11	Theoretical	Power and energy in monophase AC
12	Theoretical	Power and energy in monophase AC
13	Theoretical	Power and energy in triphase AC
14	Theoretical	Power and energy in triphase AC
15	Theoretical	Power and energy in triphase AC
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	3	56
Lecture - Practice	14	0	1	14
Assignment	4	2	0	8
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	AC basics
2	Making circuit solutions in AC,
3	Making power and energy calculations in AC.
4	Makes compensation calculations.
5	Arrange compensation panel.

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
P1	4	4	5	5	4
P2	1	1	1		
P3	1	1		1	
P4				4	4
P7	5	5	5	5	5
P9	3	3	4		3
P10					3
P11	4	3	3		
P12	4	3			
P13	4	4			4
P14	3	3	3	2	
P17	3	3			
P19				3	3
P20	3	3			