



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Electrical Electronics III							
Course Code		AEK222		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	79 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		The aim of this course is to teach and apply the basic electrical electronics and control circuits.							
Course Content		In this course; basic laws of electricity, use and application of basic laws of electricity in direct and alternating current circuits, types of electric motors, structure, working principles, principles of connection to the grid, usage areas and properties, types of control circuit elements, structures, working principles, principles of connection to the grid, usage areas The aim of this course is to improve the knowledge and skills about the properties of the control circuit, the properties of the heat control elements and how they are used.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Individual Study					
Name of Lecturer(s)		Ins. Emine ERTÜRK ŞAHİN							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Elektrik-Elektronik Mühendisliğin Temelleri Cilt 1 Yazar: Uğur Arifoğlu
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the course
2	Theoretical	Static Electricity
3	Theoretical	Static Electricity, Taking Precautions Against Unforeseen Effects of Electric Current
4	Theoretical	Preventing Unforeseen Effects of Electric Current, Circuit Solutions in Direct Current
5	Theoretical	Direct Current Circuit Solutions, Environmental Current Method
6	Theoretical	Environmental Flows Method
7	Theoretical	Node Tension Method
8	Intermediate Exam	Midterm examination
9	Theoretical	Welding Connections, Thevenin's Theorem
10	Theoretical	Thevenin's Theorem, Norton's Theorem
11	Theoretical	Super Position Theorem, Maximum Power Theorem
12	Theoretical	Maximum Power Theorem, Direct Current Storage Elements
13	Theoretical	Direct Current Storage Elements
14	Theoretical	Direct Current Power and Energy
15	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	1	13
Lecture - Practice	13	0	4	52
Midterm Examination	1	5	2	7



Final Examination	1	5	2	7
Total Workload (Hours)				79
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	
2	
3	
4	
5	

Programme Outcomes (Alternative Energy Sources Technology)

1	To have knowledge about basic science and technology.
2	To have knowledge about basic energy and alternative energy sources.
3	To have knowledge about basic electrical and electronic laws.
4	To have knowledge about the installation and operation of energy facilities.
5	Learning the methods of recycling of waste and use of energy.
6	To have experience in energy generation and project design.

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	5	5	5	5	5
P2	3	3	3	3	3
P3	5	5	5	5	4
P4	3	4	5	3	3
P5	3	3	3	3	3
P6	3	4	5	3	3

