AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Basic Electronics								
Course Code	ELE106		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	3	Workload	75 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	In this course, it is aimed to have the students gain the abilities and knowledge about basic elements in electronic circuits and making of a circuit and comparison between input-output signals								
Course Content	Circuits and experiments related with diodes and transistors								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Project Based Study, Individual Study								
Name of Lecturer(s)	Ins. İsmail MERSİNKAYA								

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

Recommended or Required Reading	
1	Basic Elektronics(Harun Bayram)

Week	Weekly Detailed Course Contents	
1	Theoretical	Monophase rectification with diode
2	Theoretical	Monophase rectification with diode
3	Theoretical	Triphase rectification with diode
4	Theoretical	Triphase rectification with diode
5	Theoretical	Ability to build up filter circuits
6	Theoretical	Ability to build up filter circuits
7	Theoretical	Usage of transistor as a switching element
8	Theoretical	Usage of transistor as a switching element
9	Theoretical	Usage of transistor as a switching element
10	Theoretical	Building up of regulation circuits
11	Theoretical	Amplifier circuits with transistor
12	Theoretical	Amplifier circuits with transistor
13	Theoretical	Amplifier circuits
14	Theoretical	Amplifier circuits

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Laboratory	5	0	2	10
Midterm Examination	1	10	1	11
Final Examination	1	11	1	12
			Total Workload (Hours)	75
			[Total Workload (Hours) / 25*] = **ECTS**	3
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Monophase and triphase rectification with diode, building up of filter circuits
2	Building up of switching circuits with transistors and regulation circuits
3	Building up of amplifier circuits
4	Sets up the transistor circuit.

5	Sets up regulated circuits.

Programme Outcomes *(Mechatronics)*	
1	TECHNICAL FOREIGN LANGUAGE
2	BASICS OF MECHATRONICS
3	TECHNICAL DRAWING
4	DOING BASIC MECHANIC PROSESES
5	CHOOSE THE MATERIALS
6	DOING MECHANICAL SYSTEM DESIGN
7	SET UP A HYDRAULİC OR PNEUMATICSYSTEMS
8	DOING COMPUTER AIDED MECHANICAL DESİGN
9	USINGFLEXIBLE PRODUCING SYSTEMS
10	USINGCOMPUTER AIDEDMACHINE TOOLS
11	DOING ELECTRICAL AND ELECTRONICAL
12	SET UP ELECTRICAL AND ELECTRONICAL CIRCUITS
13	SET UP LOGICAL CIRCIUTS
14	DOING COMPUTER AIDED ELECTRONICAL CIRCUITSDESİGN
15	SET UP ELECTRICAL MOTORS
16	SET UP MICROCONTROLLER CIRCIUTS
17	SET UP CONTROL SYSTEMS
18	COMMUNICATE CONTROL SYSTEMS
19	DOING INDUSTRIAL ROBOTIC PROGRAMMINGAND MAINTENANCE
20	WRITING COMPUTER PROGRAMME
21	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
22	Ability to plan a career in their own profession.

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	4	2	3	2
P12	3	4	2	3	2
P14	3	4	2	3	2