



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Electromechanic Control Systems							
Course Code		ELE208		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		By this course, the students learn the installation of command systems and operation of monophase and triphase asynchronous motors using command circuit elements, changing the direction of rotation and braking.							
Course Content		Giving way to monophase and triphase asynchronous motors, adjustment of direction of rotation and commanding							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Individual Study, Problem Solving					
Name of Lecturer(s)		Ins. Zafer KORKMAZ							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	lecturer notes
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Week	Weekly Detailed Course Contents	
1	Theoretical	Command Elements Protection Relays
2	Theoretical	Operation of Triphase Asynchronous Motors Interrupted and Continously
3	Theoretical	Operation of Triphase Asynchronous Motors from Two Different Remote Places
4	Theoretical	Changing the Direction of Rotation in Triphase Asynchronous Motors
5	Theoretical	Giving Way in Triphase Asynchronous Motors by Resistor with Wound Rotor
6	Theoretical	Giving Way to Triphase Asynchronous Motors by Reactance and Automobile Transformer
7	Theoretical	Giving Way to Triphase Asynchronous Motors by Star Triangle
8	Theoretical	Braking in Triphase Asynchronous Motors
9	Theoretical	Command in Motors with Double Rotation
10	Theoretical	Command Circuits of Monophase Asynchronous Motors
11	Theoretical	Changing the Direction of Rotation in Monophase Asynchronous Motors
12	Theoretical	Giving Way to DC Motors
13	Theoretical	Changing the Direction of Rotation in DC Motors
14	Theoretical	Braking in DC Motors

### 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	9	1	10
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	Installation of command elements, operation of triphase asynchronous motors interrupted, continously and remote
2	Giving way to triphase asynchronous motors with defferent methods, changing the direction of rotation and braking



3	Giving way to monophas asynchronous motors, changing the direction of rotation, giving way to asynchronous motors with wound rotor and operation of asynchronous motors having double rotation
4	Can control the two-speed motors
5	Direct current motors can change the direction of the direction of rotation.

### 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 HYDRAULIC OR PNEUMATIC SYSTEMS
8	DOING COMPUTER AIDED MECHANICAL DESIGN
9	USING FLEXIBLE PRODUCING SYSTEMS
10	USING COMPUTER AIDED MACHINE TOOLS
11	DOING ELECTRICAL AND ELECTRONICAL
12	SET UP ELECTRICAL AND ELECTRONICAL CIRCUITS
13	SET UP LOGICAL CIRCUITS
14	DOING COMPUTER AIDED ELECTRONICAL CIRCUITS DESIGN
15	SET UP ELECTRICAL MOTORS
16	SET UP MICROCONTROLLER CIRCUITS
17	SET UP CONTROL SYSTEMS
18	COMMUNICATE CONTROL SYSTEMS
19	DOING INDUSTRIAL ROBOTIC PROGRAMMING AND 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
P12	5	5	5	5	5
P15	5	5	5	5	5
P17	3	3	3	2	2

