



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Mechanism Technique							
Course Code		MTR221		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	74 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The objective of the course is to provide gaining of knowledge and skills on mechanisms for their professional career.							
Course Content		Classification of mechanisms and mechanism types, Arm mechanisms, Connecting crank mechanisms, Cam mechanisms							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Problem Solving					
Name of Lecturer(s)									

### Assessment Methods and Criteria

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

### Recommended or Required Reading

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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the class, definitions and general information about lesson,
2	Theoretical	Classification of mechanisms and types of mechanism
3	Theoretical	Mechanisms kinematic chains
4	Theoretical	Degrees of freedom of mechanisms
5	Theoretical	Kinematics of a point and an object
6	Theoretical	Velocity and acceleration analysis of mechanisms
7	Theoretical	Velocity and acceleration analysis of mechanisms
8	Theoretical	Mid-term exam
9	Theoretical	Sudden presence of centers of rotation
10	Theoretical	Four bar mechanisms
11	Theoretical	Synthesis of four bar mechanisms
12	Theoretical	Connecting rod crank mechanism
13	Theoretical	Synthesis of connecting rod crank mechanism
14	Theoretical	Cam mechanisms

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Individual Work	5	1	1	10
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				74
[Total Workload (Hours) / 25*] = ECTS				3

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	To be able to comprehend the basic principles of mechanisms.
2	To be able to recognize the types and properties of mechanisms.
3	To be able to comprehend structural elements and characteristics of mechanisms.
4	Make the synthesis and analysis of mechanisms



5	Suitable for solving problems related to mechanisms and mechanisms to make the selection.
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**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
P6	5	5	5	5	5

