AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Sensors and Transdusers								
Course Code	MTR205		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	3	Workload	75 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To gain knowledge and skills to use all kinds of sensors in related circuits it is intended								
Course Content	Temperature Sensors, Humidity Sensors, Speed ??Sensors, Vibration Sensors, Position Sensors, Approach Sensors, Pressure Sensors, Flow Sensors, Level Sensors, Pulse (Force) Sensors.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Case 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	Ders notları

Week	Weekly Detailed Course Contents	
1	Theoretical	Position Sensors
2	Theoretical	Position Sensors
3	Theoretical	Temperature sensors
4	Theoretical	Temperature sensors
5	Theoretical	Humidity sensors
6	Theoretical	Flow Sensors
7	Theoretical	Flow Sensors
8	Theoretical	Level sensors
9	Theoretical	Impact sensors
10	Theoretical	Impact sensors
11	Theoretical	Speed ??/ vibration / acceleration sensors
12	Theoretical	Approach sensors
13	Theoretical	Pressure sensors
14	Theoretical	light sensor
15	Theoretical	Color sensors

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	6	0	1	6
Midterm Examination	1	10	1	11
Final Examination	1	15	1	16
			Total Workload (Hours)	75
			[Total Workload (Hours) / 25*] = **ECTS**	3
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Define sensor and tranduser
2	To understand the operation of sensors and transducers

3	Be able to design sensor
4	To make transducer design
5	To be able to apply sensors and transducers with microprocessors.

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
P5	5	5	5	5	5
P19	3	3	3	3	3