AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Microcontroller								
Course Code	MTR201		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	4	Workload	97 *(Hours)*	Theory	3	Practice	1	Laboratory	0
Objectives of the Course	In this lesson, students choosing a microcontroller as a problem to solve, this will set up the algorithm that creates the solution and flow diagram for microcontroller. The algorithm that creates the microcontroller with, after you fix the errors by performing commands compiled program microcontroller.								
Course Content	Differences between microprocessor systems and microcontroller systems, Algorithms, Flow diagrams, Microcontroller commands, Microcontroller and keypad circuits								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment								
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	
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Week	Weekly Detailed Course Contents	
2	Theoretical	Microcontroller systems, translating the program into machine language Programmer cards
3	Theoretical	Installing the compiled program microcontroller, algorithms
4	Theoretical	Algorithms, flow diagrams
5	Theoretical	Algorithms, flow diagrams, microcontroller memory map
6	Theoretical	Microcontroller memory map, microcontroller commands
7	Theoretical	Microcontroller commands
8	Theoretical	Microcontroller Microcontroller program editor program, base blocks
9	Theoretical	Microcontroller program base blocks, basic input output programs
10	Theoretical	Run the compiled assembly, program the microcontroller program step by step
11	Theoretical	Microcontroller with buttons and LEDs to make applications
12	Theoretical	Microcontroller with 7 segment display circuits set up
13	Theoretical	Keypad circuits set up with microcontroller
14	Theoretical	Microcontroller with LCD devices found
15	Final Exam	final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Lecture - Practice	14	1	1	28
Laboratory	7	0	1	7
Midterm Examination	1	9	1	10
Final Examination	1	9	1	10
			Total Workload (Hours)	97
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	select the appropriate microprocessor Work
2	to install the Program on the microcontroller

3	create the algorithm and the solution to the flow diagram
4	registrars to use Microcontroller
5	use the Microcontroller commands
6	write programs with microcontroller basic input output
7	Program to compile and edit errors
8	to make buttons and LED applications with microcontroller
9	set up the 7 segment display circuit with microcontroller
10	set up the 7 segment display circuit with microcontroller

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	L6	L7	L8	L9	L10
P13	5	5	5	5	5	5	5	5	5	5
P16	5	5	5	5	5	5	5	5	5	5
P17	5	5	5	5	5	5	5	5	5	5