AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Welding Technology								
Course Code	MKE213		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	2	Workload	50 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Melting-based welding methods and the ability to weld under protective atmosphere are aimed.								
Course Content	Gas melting welding, Electric arc welding, MIG / MAG welding, TIG welding.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration								
Name of Lecturer(s)	Assoc. Prof. Ali Kemal ÇAKIR								

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

Recommended or Required Reading	
1	Kaynak Teknolojisi ders notları

Week	Weekly Detailed Course Contents	
1	Theoretical	Gas melting furnace
2	Theoretical	Gas melting furnace
3	Theoretical	Gas melting furnace
4	Theoretical	Electric arc welding
5	Theoretical	Electric arc welding
6	Theoretical	Electric arc welding
7	Theoretical	MIG / MAG welding
8	Theoretical	MIG / MAG welding
9	Intermediate Exam	Midterm
10	Theoretical	MIG / MAG welding
11	Theoretical	TIG welding
12	Theoretical	TIG welding
13	Theoretical	TIG welding
14	Theoretical	Submerged Arc welding
15	Theoretical	Submerged Arc welding
16	Final Exam	Final Examination

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	5	0	1	5
Term Project	5	0	1	5
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
			Total Workload (Hours)	50
			[Total Workload (Hours) / 25*] = **ECTS**	2
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Making gas melting welding
2	Making electrical arc welding

3	Welding under gas atmosphere (MIG / MAG)
4	Make a TIG welding
5	Submerged Arc Welding

Programme Outcomes *(Machinery)*	
1	To be able to know general properties and usage areas of industrial materials and make selection.
2	Design of machine elements.
3	To be able to make production using machining and welding machines without machining.
4	To be able to make measurement and quality control processes with machine tools for measuring and control equipment.
5	To be able to make necessary corrections in order to determine the mistakes by using the necessary non-destructive test methods in welded parts and to eliminate these mistakes.
6	Preventive measures to prevent the occurrence of these faults by preliminarily determining the faults that will occur in the machines as statistical data and to make necessary interventions in case of breakdown.
7	They can make drawings of work pieces on CAD station and apply them on CNC looms. Ability to operate and use CAD / CAM and AUTOCAD package programs.
8	To be able to transfer engineering science and technology to practice by making calculations in the direction of scientific principles.
9	It can repair the elements in pneumatic and hydraulic systems which are indispensable elements of automatic control systems and can regulate their work.
10	The student who is trained as a machine technician during the whole program knows that industrial task definition in the field of work is error finding, problem solving, decision making, planning of functions and activities and they can be achieved by aiming to acquire these characteristics.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4
P1	5	4	4	5
P2	5	4	4	4
P3	5	4	5	5
P4	5	4	4	4
P5	4	5	5	5
P6	4	4	4	4
P7	4	5	5	5
P8	5	4	4	4
P9	5	5	4	5
P10	5	4	4	5