



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Manufacturing Methods								
Course Code	ÜKK102		Course Level		Short Cycle (Associate's Degree)				
ECTS Credit	3	Workload	75 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Understanding the types of production methods, their application areas and the importance of production.								
Course Content	To know production methods and application areas								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Lecture Notes

Week	Weekly Detailed Course Contents	
1	Theoretical	General information about production methods
2	Theoretical	Extrusion method
3	Theoretical	Rolling method
4	Theoretical	Forging method
5	Theoretical	Wire and bar drawing method
6	Theoretical	Forming by casting method
7	Intermediate Exam	Midterm
8	Theoretical	Injection method
9	Theoretical	Sheet metal forming
10	Theoretical	Sheet metal forming
11	Theoretical	Machining methods
12	Theoretical	Machining methods
13	Theoretical	Detachable combination methods
14	Theoretical	Unassembled assembly methods
15	Theoretical	Production with three-dimensional printers
16	Final Exam	Semester final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	2	5	0	10
Midterm Examination	1	10	1	11
Final Examination	1	11	1	12
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

\*25 hour workload is accepted as 1 ECTS

Learning Outcomes	
1	Defines the machines and tools used in manufacturing processes
2	Decides on which material the product will be produced and the method of production.
3	Learn and use the structure of adjustable measuring and control instruments



4	Can apply machining operations by using universal lathe.
5	Can apply machining operations by using universal milling machine.
6	Can use CNC milling machine.

#### Programme Outcomes (Quality Control in Production)

1	To be able to be bounded to the Atatürk nationalism, adopted to the national, ethic, spiritual and cultural value of the Turkish Nation, opened to the universal and modern development, adopted the richness, deep seated and productive properties of the Turkish language, having language sympathy and awareness, having reading pleasure and habit and having sufficient foreign language for their vocational necessities, In the directions of the Atatürk Principles and Revolutions,
2	To be able to comprehend social, cultural and societal responsibility and keep up with national and international up contemporary issues and developments.
3	Utilizes together mathematics, science and theoretical and applied knowledge in their field for engineering solutions.
4	Determines, identifies formulizes and solves the problems. For this purpose selects and applies analytical methods and modeling techniques.
5	Selects and utilizes the necessary modern techniques and equipment for industrial applications.
6	Designs and performs experiments, collects data and analyzes and elaborates results.
7	Works effectively as an individual or in multidisciplinary teams.
8	Collects information and makes literature survey for this purpose, utilizes databases and other information sources.
9	Be aware of lifelong learning; follows the developments in science and technology and continuously renews himself.
10	Analyzes and designs under realistic constraints a system, a system component or a process for meeting the required needs, for this purpose applies modern design methods.
11	Acquires professionalism and ethical responsibility in the profession.
12	Communicates by using technical drawing and manufacturing knowledge.
13	Be aware of the universal and social effects of industrial solutions and applications; is aware of entrepreneurship and innovation and has idea about the problems of the era.
14	Has knowledge about quality assurance and standardization and possess skills of execution of operations. In the same time, has the professional and ethical responsibility.
15	Is conscious of project management, business administration, health of the workers, environment and work safety; is aware of the legal consequences of industrial applications.

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

	L1	L2
P3	5	5
P4	4	3
P5	3	5
P6		4
P8	3	2
P10		4

