

MANUFACTURING METHODS

1	Course Title:	MANUFACTURING METHODS	
2	Course Code:	END2012	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	4	
7	ECTS Credits Allocated:	2.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	-	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. Nurettin Yavuz	
15	Course Lecturers:	-	
16	Contact information of the Course Coordinator:	0 224 294 0651 nyavuz@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	To train students in understanding of manufacturing methods and technology.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Select appropriate manufacturing methods for different materials and shapes.
		2	Select appropriate casting methods for different materials and shapes.
		3	Select appropriate plastic forming methods for different materials and shapes.
		4	Select appropriate welding methods for different materials and shapes.
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Introduction		
2	Casting		
3	Casting Methods		
4	Casting Methods		
5	Casting Materials and Defects		

6	Plastic Forming of Metals	
7	Mechanisms of Plastic Forming of Metals	
8	Repeating courses and midterm exam	
9	Methods of Plastic Forming of Metals	
10	Extrusion	
11	Pipe Manufacturing	
12	Welding Processes	
13	Weldability	
14	Powder Metallurgy	

22	Textbooks, References and/or Other Materials:	1. ÇİĞDEM,M. 2000 “İmal Usulleri”, 2. Materials Science and Engineering: An Introduction Fourth Edition (William D.Callister, Department of Metallurgical Engineering The University of Utah)1998 3. Manufacturing Processes and Systems (9th Edition) (Ostwald, Phillip F.; Muñoz, Jairo) 1997 John Wiley & Sons 4. KAYALI,E.S ve ENSARI,C. 1986 “Metallere Plastik Şekil Verme İlike ve Uygulamaları”, 5. DIETER,G.E. 1976 “Mechanical Metallurgy”
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23	Assesment			
Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical Quiz	2	14 20.00	2.00	28.00
Practicals/Labs		0	0.00	0.00
Self study and preperation		14	2.00	28.00
Final Exam	1	50.00		
Homeworks		0	0.00	0.00
Projects		0	0.00	0.00
Contribution of Term (Year) Learning Activities to Field Studies		50.00	0.00	0.00
Midterm exams		0	0.00	0.00
Contribution of Final Exam to Success Grade		50.00	16.00	16.00
Others		0	0.00	0.00
Final Exams		1	18.00	18.00
Measurement and Evaluation Techniques Used in the				
Total Work Load				90.00
24	ECTS WORK LOAD TABLE			3.00
ECTS Credit of the Course				2.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	0	0	5	4	0	0	0	2	0	3	0	0	0	0	0	0
ÖK2	0	0	5	4	0	0	0	2	0	3	0	0	0	0	0	0
ÖK3	0	0	5	4	0	0	0	2	0	3	0	0	0	0	0	0
ÖK4	0	0	5	4	0	0	0	2	0	3	0	0	0	0	0	0

ÖK5	0	0	5	0	0	0	0	2	0	3	0	0	0	0	0	0
ÖK6	0	0	5	0	0	0	0	2	0	3	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			