

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Machine Knowledge							
Course Code		MKE180		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Introduction of Basic Machines Giving the solution approach of the problems related to machine design Teaching basic machine subjects Developing the ability to work in teams							
Course Content			neral, Basic co	ncepts in ma	achine, Cla	ssification of n		vork done by mach nents in general, S	
Work Placemer	nt	N/A							
Planned Learning Activities and Teaching Methods				anation (Presentation), Demonstration, Discussion, Case Study, vidual Study, Problem Solving					
Name of Lecturer(s)  Assoc. Prof. Ali Kemal ÇAKIR				IR					

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

# **Recommended or Required Reading**

1 Basic Machine Knowledge Course Notes

Week	<b>Weekly Detailed Cour</b>	se Contents
1	Theoretical	Machining as a Profession.
2	Theoretical	Energy and Machinery. Dimensions, Units and Error
3	Theoretical	Unit analysis, unit transformations and related applications
4	Theoretical	Description of measurement and control issues, introduction of used measuring instruments
5	Theoretical	Caliper as dimension measuring instruments, micrometer and dial gauge Infinitives as instruments.  Measure reading applications with caliper and micrometer
6	Theoretical	Connecting elements, welding connections, Solder connections, Bonding connections, Bolt connections
7	Theoretical	Professional and ethical responsibility explaining to have
8	Theoretical	National and international standards and quality organizations. Standard and Definition of quality.
9	Intermediate Exam	midterm
10	Theoretical	Entrepreneur and self-confidence of students explaining
11	Theoretical	Engineering service national and global have knowledge about the dimensions
12	Theoretical	Industrial rights, intellectual property rights, patent licensing
13	Theoretical	Science and technology policy
14	Theoretical	Machine Design
15	Theoretical	Visiting an industrial organization, Manufacturing



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Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Assignment	5	0	3	15
Midterm Examination	1	3	1	4
Final Examination	1	2	1	3
	50			
	2			
*25 hour workload is accepted as 1 ECTS				

## **Learning Outcomes**

- Mathematics, science and engineering related fields sufficient knowledge of the issues; theoretical and apply practical knowledge to modeling engineering problems and ability to apply for solving.
- Realistic complex system, process, device or product under certain conditions and conditions, ability to design in a way; modern design for this purpose the ability to apply methods.
- Designing experiments to investigate engineering problems, conducting experiments, collecting data, analyzing results and interpretation skill
- Awareness of the necessity of lifelong learning; information accessing, monitoring developments in science and technology; and self-renewal ability.
- 5 Awareness of professional and ethical responsibility
- To introduce the basic level of material knowledge, measurement methods, machine parts and machine tools used in part production.

#### **Programme Outcomes** (Business Administration Management)

- 1 To be able to use the theoretical knowledge in business management in working life
- 2 Having the ability to use the management functions of the business and following new management techniques
- To be able to fulfill the legal responsibilities of the operator, to have the knowledge and equipment to follow and implement the relevant legislation
- To be able to use the information and communication technologies at the level required by the field, to adapt the new technologies to the operating systems by following the technological changes
- 5 To identify, analyze and bring solutions to problems encountered in professional practice
- 6 Managing business financing; bringing a solution to the financial problems by making the financial analysis of the business
- Gaining the ability to manage the business by ensuring that the human resources operate and develop efficiently in line with business objectives
- To be able to comprehend the basic functions of production and marketing as a whole and to be able to apply new production and marketing techniques
- To be able to perform cost calculations in enterprises, to hold accounting records, to prepare financial statements and to be able to interpret
- Having professional ethical values ??sought in the qualified personnel required by the market, and able to use Turkish language effectively in written and oral communication; To be able to have professional foreign language knowledge that can make international correspondences related to the field
- 11 Having analytical analysis, interpretation, evaluation and solution skills of field related information
- To be able to follow and apply current and economic developments in national and international framework related to his / her 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
P1	1	1	1	1	1	1
P2	1	1	1	1	1	1
P3	1	1	1	1	1	1
P4	1	1	1	1	1	1
P5	1	1	1	1	1	1
P6	1	1	1	1	1	1
P7	1	1	1	1	1	1
P8	1	1	1	1	1	1
P9	1	1	1	1	1	1



P10	1	1	1	1	1	1
P11	1	1	1	1	1	1
P12	1	1	1	1	1	1

