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	Historical development of machines, Professional ethics, Introduction to the work done by machine makers in general, Basic concepts in machine, Classification of machine elements in general, Simple Strength Calculations, Machine tools and their work.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study, Problem Solving								
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	Basic Machine Knowledge Course Notes

Week	Weekly Detailed Course 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

16	Final Exam	Final Exam

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
			Total Workload (Hours)	50
			[Total Workload (Hours) / 25*] = **ECTS**	2
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	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.
2	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.
3	Designing experiments to investigate engineering problems, conducting experiments, collecting data, analyzing results and interpretation skill
4	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
6	To introduce the basic level of material knowledge, measurement methods, machine parts and machine tools used in part production.

Programme Outcomes *(Office Mangement and Executive Assistantship)*	
1	The ability of using information and communication tools and the other vocational tools and techniques.
2	The ability of planning and applying vocational process.
3	The ability of communicating in foreign language.
4	The ability of vocational self-confidence.
5	The ability of enteprenurism.
6	The ability of using theorical field information at the practice.
7	The ability of managing a process that provides the needs.
8	The ability of working in groups including interdisciplinary.
9	The ability of defining problems and solving them in vocational practice.
10	The awareness of vocational ethic and responsibility.
11	The awareness of necessity of life-long learning and the ability to make come true this.
12	The ability of having information about sectoral problems.
13	The ability of understanding vocational legal regulation and applying.
14	The ability of having an effective communication.
15	Social, cultural and social responsibilities of the grip, and the ability to apply to adopt.

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
P6	4	4			4	4
P15			4	4		