



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Introduction to Mathematics II							
Course Code		MAT182		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	106 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to teach students the necessary information on their works and to gain the ability of using his/her knowledge							
Course Content		Sets, functions, first and second order equations, parabols, trigonometry, complex numbers, logarithm, matrices and their applications in profession.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)		İns. Gamze BAKIR GÜVEN, İns. Muhittin TURAN, İns. Neslihan BİLİNMEZ, Lec. Kübra GENÇDAĞ ŞENSOY							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	MYO Öğrencileri İçin Temel Matematik, Prof. Dr. Mustafa BALCI
2	Akademi yayınları "KPSS genel yetenek ilkadım matematik"

Week	Weekly Detailed Course Contents	
1	Theoretical	Sets
2	Theoretical	Functions
3	Theoretical	Functions
4	Theoretical	First and second order equations
5	Theoretical	Birinci ve ikinci dereceden denklemler
6	Theoretical	Parabola
7	Theoretical	Trigonometric Functions
8	Theoretical	Trigonometric Functions
9	Theoretical	MIDTERM EXAM
10	Theoretical	Complex Numbers
11	Theoretical	Complex Numbers
12	Theoretical	Logarithm
13	Theoretical	Logarithm
14	Theoretical	Matrices
15	Theoretical	Matrices
16	Final Exam	FINAL EXAM

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	2	70
Midterm Examination	1	12	2	14
Final Examination	1	20	2	22
Total Workload (Hours)				106
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To write equations and to gain the ability of solving problems
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2	To gain the information on the background of complex number
3	To gain the fundamental information about trigonometry
4	To gain the fundamental information about logarithm
5	To understand the concept of matrix and to use them

#### 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	L5
P2	3	3	3	3	3
P4	3	3	3	3	3
P6	3	3	3	3	3
P8	3	3	3	3	3
P9	3	3	3		3

