



## 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)		Ins. Gamze BAKIR GÜVEN, Ins. Muhittin TURAN, Ins. 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
---	--



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 (Mechatronics)

1	TECHNICAL FOREIGN LANGUAGE
2	BASICS OF MECHATRONICS
3	TECHNICAL DRAWING
4	DOING BASIC MECHANIC PROSESES
5	CHOOSE THE MATERIALS
6	DOING MECHANICAL SYSTEM DESIGN
7	SET UP A HYDRAULIC OR PNEUMATIC SYSTEMS
8	DOING COMPUTER AIDED MECHANICAL DESIGN
9	USING FLEXIBLE PRODUCING SYSTEMS
10	USING COMPUTER AIDED MACHINE TOOLS
11	DOING ELECTRICAL AND ELECTRONICAL
12	SET UP ELECTRICAL AND ELECTRONICAL CIRCUITS
13	SET UP LOGICAL CIRCUITS
14	DOING COMPUTER AIDED ELECTRONICAL CIRCUITS DESIGN
15	SET UP ELECTRICAL MOTORS
16	SET UP MICROCONTROLLER CIRCUITS
17	SET UP CONTROL SYSTEMS
18	COMMUNICATE CONTROL SYSTEMS
19	DOING INDUSTRIAL ROBOTIC PROGRAMMING AND MAINTENANCE
20	WRITING COMPUTER PROGRAMME
21	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
22	Ability to plan a career in their own profession.

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

	L1
P2	2

