



AYDIN ADNAN MENDERES UNIVERSITY
SÖKE VOCATIONAL SCHOOL
ELECTRICAL AND ENERGY
ALTERNATIVE ENERGY SOURCES TECHNOLOGY
COURSE INFORMATION FORM

Course Title	Introduction to Mathematics I								
Course Code	MAT181			Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	106 (Hours)	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	Numbers, type of numbers, equations, inequality, absolute value, exponential numbers and root of numbers, ratio and proportion and problems of writing equation								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Case Study, Individual Study, Problem Solving								
Name of Lecturer(s)	Lec. Gökhan AKSU, Lec. Kübra GENÇDAĞ ŞENSOY, Lec. Fatma EKİZ, Ins. Ali BÜYÜKMERT, Ins. Emine ERTÜRK ŞAHİN, Ins. Erdinç VURAL, Ins. Erhan KOCA, Ins. Muhittin TURAN, Ins. Neslihan BİLİNMEZ, Ins. Yasemin COŞKUN ERDOĞAN								

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

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	Numbers
2	Theoretical	Systems of Numbers
3	Theoretical	Division and divisibility
4	Theoretical	Prime factorization, GCD, LCM
5	Theoretical	Rational Numbers
6	Theoretical	Decimal Numbers
7	Theoretical	First Degree Equations
8	Theoretical	Basic Inequalities
9	Intermediate Exam	MIDTERM EXAM
10	Theoretical	Absolute Value
11	Theoretical	Exponential Numbers
12	Theoretical	Root of Numbers
13	Theoretical	Factorizations
14	Theoretical	Ratio and Proportion
15	Theoretical	Problems of Ratio and Proportion
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 understand the definition and basic properties of numbers
2	To understand the type of numbers and characteristic of number operations
3	To understand and use of exponential and root of numbers
4	To solve the problems of ratio and proportion
5	To be able to gain the skill of interpreting some interrelations among these concepts

Programme Outcomes (*Alternative Energy Sources Technology*)

1	Carry out installing work
2	Do mechanical drawing
3	Do pipe welding
4	Do basic electricity works
5	Do Computer assisted design
6	Install solar energy hot water preparation system.
7	Do measurement and calculations practices.
8	Do basic practices of geothermal energy.
9	Install control and automation system.
10	Install domestic water heating system with solar energy.
11	Generate electricity with solar energy
12	Generate electricity with wind power
13	Do geothermal energy practices
14	Install domestic cooling system
15	Do heating pump practices
16	Manage a business
17	SET UP A WORKPLACE/ BUSINESS (pre-requisite)
18	OBEY VOCATIONAL ETHICAL VALUES
19	RESEARCH AND EVALUATION/OBSERVATION
20	SELFIMPROVEMENT WITH USING INFORMATION FACILITIES
21	Knows the effects of all energy sources on the environment.
22	Can communicate in a foreign language

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

	L1	L2	L3	L4	L5
P7	2	2	2	2	2

