



**AYDIN ADNAN MENDERES UNIVERSITY
KOÇARLI VOCATIONAL SCHOOL
MECHANICAL AND METAL TECHNOLOGY
AGRICULTURAL MACHINERY
COURSE INFORMATION FORM**

Course Title	Basic Mathematics I								
Course Code	MAT183			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 about the properties of numbers and mathematical background to create and gain the ability to approach problems in a rational way								
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), Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)	Lec. Filiz AKSOY, Ins. Fatih TOZOĞLU, Ins. Halil TEKATLI, Ins. Ümit NARİNCE								

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Yüksek Okulu ve Teknik Eğitim Fakülteleri İçin Temel Matematik , Prof. Dr. Mustafa Balcı
2	Temel Matematik I-II , Prof. Dr. Ahmet Kaçar

Week	Weekly Detailed Course Contents	
1	Theoretical	Numbers
2	Theoretical	System of Numbers
3	Theoretical	Division and Divisibility
4	Theoretical	Prime factorization, GCD, LCM
5	Theoretical	Rational Numbers
6	Theoretical	Decimal Numbers
7	Intermediate Exam	Midterm
8	Theoretical	1. Dereceden Denklemler
9	Theoretical	Basic Inequality
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	Theoretical	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	Exponential and root of a number
4	Factorization
5	To solve the problems of ratio and proportion

Programme Outcomes (Agricultural Machinery)

1	To be able to comprehend social, cultural and societal responsibility and keep up with national and international up contemporary issues and developments.
2	To be able to be bounded to the Atatürk nationalism, adopted to the national, ethic, spiritual and cultural value of the Turkish Nation, opened to the universal and modern development, adopted the richness, deep seated and productive properties of the Turkish language, having language sympathy and awareness, having reading pleasure and habit and having sufficient foreign language for their vocational necessities, In the directions of the Atatürk Principles and Revolutions,
3	To be able to recognize the basic computer hardware and operating systems , knowledge of internet usage being able to prepare documents, electronic tables and presentation by using office programs.
4	To be able to be aware of ethic responsibility and vocational profession and to have consciousness of a lifelong learning concept
5	To be able to know current vocational issues and to have skill to define and interpret them.
6	To be able to be aware of the universal and social dimensional effects in engineering solutions, and to be able to have knowledge about entrepreneurship and newfangledness.
7	To recognize the materials which used for preparation of agricultural machinery and have skill for the choosing the appropriate material.
8	To be able to acquire the skill of using the necessary tools and equipments which are used in the production and maintenance of agricultural machinery.
9	To be able to prepare the agricultural tools and machineries, to determine the breakdowns and to do periodic maintenance and repairs.
10	To be able to comprehend the picture of the agricultural tools and machinery and their fabrication , and have the skill to draw them via computer.
11	To be able to assemble and to combine machinery pieces by using demountable and nondetachable junction methods.
12	To be able to have the skill of resistance calculations of the agricultural tool and machinery on computer.
13	To be able to test and control the suitability of new machines and mechanic equipment to the definite standarts and technical properties.
14	To be able to have general knowledge of agricultural production.
15	To be able to have knowledge of basic sciences.

