



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Mathematics							
Course Code		OTT111		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To comprehend the importance of mathematics in the professional sense, to provide the necessary mathematical background to complete the associate degree program and to understand the numerical problems in accounting profession better.							
Course Content		Numbers, exponential numbers, radical numbers, interest, vat and exchange calculations.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Problem Solving					
Name of Lecturer(s)		Ins. Neslihan BİLİNMEZ							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Basic Mathematics, Dr.E.Tuğba AKYÜZ (Textbook, 2011)
2	Course notes

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic Concepts (Numbers), Rational Numbers and Decimal Fractions, Number Systems and the Concept of Digits
2	Theoretical	Prime Factors and Exact Divisor Number, Divide and Divide Rules
3	Theoretical	Exponential numbers and equations
4	Theoretical	Root numbers and operations
5	Theoretical	Equations with first order unknown and second order unknown.
6	Theoretical	Converting to first and second order equation
7	Theoretical	Factorization and Identities
8	Theoretical	Ratio Ratio, Arithmetic and Geometric Mean
9	Intermediate Exam	midterm exam
10	Theoretical	Trigonometry, Angles and Sine Theorem
11	Theoretical	Functions
12	Theoretical	Permutation, Combination
13	Theoretical	Geometric Concepts, Angles in Line, Polygons and Quadrilaterals
14	Theoretical	Circle and Circle, Analytical Geometry, Solid Bodies
15	Theoretical	Problem Solutions
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	12	0	5	60
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4

\*25 hour workload is accepted as 1 ECTS



**Learning Outcomes**

1	Learn the theory and applications of numbers.
2	To be able to comprehend the topics related to exponential and rooted expressions
3	To be able to comprehend equations and inequalities, to produce solutions to problems related to the field
4	Identity and factorization, to be able to comprehend the ratio-ratio issues, to produce solutions to problems related to the field
5	Learn the theory and applications of geometry.

**Programme Outcomes (Automotive Technology)**

1	To be able to interpret and evaluate data, identify problems, analyze them, and develop evidence-based solutions by using basic knowledge and skills in the field.
2	Must be able to choose and effectively use the modern techniques, tools and information technologies necessary for field related applications.
3	Must be able to gain practical skills by examining relevant processes in industry and service sector on site.
4	They must be able to produce solutions, take responsibility for teams or do individual work when they encounter situations unforeseen in the field related applications.
5	Awareness of the need for lifelong learning; it must be able to follow the developments in science and technology and to constantly renew itself.
6	Must be able to use computer software and hardware at the basic level required by the field
7	Must have job security, worker health, environmental protection knowledge and quality awareness.
8	He must possess a level of foreign language knowledge that is capable of following the innovations in his area of expertise and communication techniques.
9	Must be able to acquire basic theoretical and practical knowledge about the field in mathematics, science and basic engineering.
10	It should have the ability to plan the processes / processes of the Automotive Program to meet the expectations of the sector.
11	To be able to design the systems and components related to the field by using technical drawing, computer aided drawing, designing using simulation programs and using various softwares, to be able to make basic sizing calculations, to be able to master professional plans and projects.

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

	L1	L2	L3	L4	L5
P1	4	4	3	4	3
P2	4	4	3	4	3
P3	3	4	3	4	3
P4	3	3	4	3	4
P5	4	3	4	3	3
P6	3	3	4	3	4
P7	5	3	4	4	3
P8	3	3	3	4	4
P9	3	3	3	3	3
P10	4	3	3	4	4
P11	4	3	4	3	3

