Course title		Code	semester	T+U	credit	ECTS
Math 1			one	4+0	4	6

Prerequisite Courses	None
Language of the Course	English
Course Level	Undergraduate
Type of Course	Compulsory
Course Coordinator	
Instructors	
Course Assistants	
The aim of lesson	This course teaches first year students about the basic concepts of mathematics and introduces them to the importance of mathematics in other subjects. At the same time, this course shows that mathematics is a basic science.
Course Content	Analytical examination of a truth. Functions, limit concept, derivative and application, linear transformations, matrices and applications
Course Learning Outcomes	At the end of this course, the student; 1) Uses the concepts of limit and continuity in functions of one variable. 2) Comprehends the importance of derivative in engineering. 3) Apply differentiation methods to different problems. 4) Comprehends the importance of integral in engineering. 5) Comprehends the integration methods.

Weeks	Topics
one	Sets, Real and complex numbers.
2	Function and types of functions.
3	Limit, continuity, applications of the limit.
4	Derivative and its various applications
5	Inverse trigonometric functions
6	Exponential function and logarithm function, Hyperbolic functions
7	Various Problems
8	Parametric equations, polar coordinates
9	Differential, curvature
10	radius of curvature, circle of curvature
11th	mean theorem
12	Taylor and Maclaurin formulas, indefinite shapes
13	Determinants, matrices, systems of linear equations, matrix forms, vectors
14	An overview

General Competencies

resources

1) Murathan Cengizhan, Özdamar Ertuğrul, Hacısalihoğlu H. Hilmi, Ekmekçi Nejat, Yaylı Yusuf, Solved Differential Geometry Problems Volume: 2, Bilim Publications, 2005.
2) Hacısalihoğlu H. Hilmi, Linear Algebra Vol:2, Hacısalihoğlu Publishing, 2000.
3) Balcı Mustafa, General Mathematics – 2, Balcı Publications, 2007.
4) Balcı Mustafa, Solved General Mathematical Problems – 1, Balcı Publications, 2007.

Evaluation System

The dates, days and hours of the Midterm Exam, Quiz, Final Exam and Evaluations will be announced later, according to the decision of the Faculty Administrative Board.

	WITH PROGRAM LEARNING OUTCOMES COURSE LEARNING OUTCOMES RELATIONSHIP TABLE										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
LO1	5	5	5	2	2						
LO2	5	5	5	3	3						
LO3	5	5	4	2	3						
LO4	5	5	5	3	3						
LO5	5	5	5	4	4						
LO: Learning Outcomes OP: Program Outcomes											
Contribution Level	1 Very Low		2 Low		3 Medium		4 High		5 Very High		

Relation of Program Outcomes and Related Course

Course name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
Math 1	5	5	5	3	3						