

**Vocational School / Construction Technology**  
**2024 - 2025 Academic Year**  
**GENERAL MATHEMATICS**  
**Syllabus**

<b>Course Description</b>					
<b>Name</b>	<b>Code</b>	<b>Semester</b>	<b>T+A Hour</b>	<b>Credit</b>	<b>ECTS</b>
GENERAL MATHEMATICS	İNŞ1160890	Fall Semester	3+0	3	4
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	Turkish				
<b>Course Level</b>	Short Cycle (Associate's Degree)				
<b>Course Type</b>	Required				
<b>Course Coordinator</b>	Lect. Hatice ÇAY				
<b>Name of Lecturer(s)</b>	Lect. Hatice ÇAY				
<b>Assistant(s)</b>					
<b>Aim</b>	The aim of this course is to explain fundamental math contents, methods, techniques and show how to use these methods in solving certain types of problems which might possibly be encountered in many branches of science.				
<b>Course Content</b>	This course contains; Basic Concepts, Absolute value and intervals, Functions, Trigonometric functions, Logarithmic functions, Exponential functions, Limit, Continuity, Definition of derivative, Applications of derivative, Indefinite integrals, partial integration, Definite integration, Some applications of integral.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
1. Explain and recognize set of integers, rational number and irrational number.			12, 16, 6, 9	A, D, E, G	
2. Explain function.			12, 16, 6, 9	A, D, E, G	
3. Calculate limits of functions.			12, 16, 6, 9	A, D, E, G	
4. Calculate derivatives.			12, 16, 6, 9	A, D, E, G	
5. Calculate integrals.			12, 16, 6, 9	A, D, E, G	
<b>Teaching Methods</b>	12: Problem Solving Method, 16: Question - Answer Technique, 6: Experiential Learning, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam, D: Oral Exam, E: Homework, G: Quiz				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	Basic Concepts				
2	Absolute value and intervals				
3	Functions				
4	Trigonometric functions				
5	Logarithmic functions				
6	Exponential functions				
7	Limit				
8	Continuity				
9	Definition of derivative				
10	Applications of derivative				
11	Indefinite integrals				
12	partial integration				
13	Definite integration				
14	Some applications of integral				
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		40			
General Exam		60			
<b>Resources</b>					
Thomas Kalkülüs 1. Cilt, Pearson Yayınları Matematik Analiz Salih Çelik, Birsen Yayınevi.					