

Course Name	Course Code	Semester	T + P	Credit	ECTS
Discrete Structures		3	3 + 0	3	4

Prerequisite Courses	None
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If the language of Code	Turkish
Course class	Compulsory
If the Coordinator of Code	
Instructor	
Assistant Course	
Objective of Course	It aims to examine discrete mathematical subjects and their computer engineering applications.
Course Learning Output	The ability to design a system, part, or process with discrete models to meet desired requirements, Ability to apply math, science and engineering knowledge
Contents Course	Examination of discrete mathematics subjects and their computer engineering applications

Weeks	Topics
1	Introduction to Discrete Mathematics, Proposition
2	Mathematical proof methods
3	Mathematical proof methods
4	Set Theory and Algebra
5	Relationships and Operations, Functions
6	Relationships and Operations, Functions
7	MIDTERM
8	Groups and Semi Groups, Cage Structure and Boolean Algebra
9	Groups and Semi Groups, Cage Structure and Boolean Algebra
10	Graph Theory
11	Graph Theory
12	Recurrence Relations and Algorithms
13	Finite State Machines
14	Turing Machines
15	FINAL EXAM

General Sufficiency
Modeling and analyzing discrete mathematics concepts and problems.
References
<ul style="list-style-type: none"> • Johnsonbaugh, Richard, Discrete Mathematics, Prentice-Hall, 2001. • Grimaldi, Ralph P. , "Discrete and Combinatorial Mathematics", Addison-Wesley, 2004.
Assessment
Midterm: 40% Final exam: 60% of the project or assignment can be made and announced at the beginning of the semester evaluations.