

Course title	Code	semester	T+U	Credit	ECTS
Algorithm and Programming 2		2	3+2	4	7
Prerequisite Courses	None				
Language of the Course	Turkish				
Course Level	Licence				
Type of Course	Compulsory				
Course Coordinator					
Instructors					
Course assistants					
The aim of lesson	<ol style="list-style-type: none"> 1. To eliminate the basic programming and algorithm deficiencies in the Algorithm and Programming-I course that the student took in the first semester, 2. To help students gain the logic of project development by learning the functional aspects of the object-oriented programming language. 				
Course Content	<p>Introduction to Object Oriented Programming and a suitable programming environment. Basic concepts in this language (expressions, data types, variables, control structures, arrays, ...). Divide and Solve Method. Modular software development (methods and classes). Class Variables and Local Variables. Form Elements. Introduction to Event Driven Programming. Dynamic Arrays. Linked Lists. Search and Sorting Algorithms. Folders. Selection of appropriate structures in algorithms. Development of effective algorithms.</p>				
Course Learning Outcomes	<p>Students who can successfully complete this course;</p> <ol style="list-style-type: none"> 1. To learn the general concepts of programming, 2. To understand the concept of algorithms, how to create algorithms and structured programming issues. 3. To learn the basic features of the Java programming language, which is a language that every programmer should know with its structural features and powerful opportunities, in relation to the concept of algorithm. 				
Weeks	Topics				
one	Introduction to Object Oriented Programming and introduction of a suitable programming environment.				
2	Basic concepts in this programming language (expressions, data types, variables, control structures)				
3	Divide and Solve Method.				
4	Modular software development (methods and classes).				
5	Class Variables and Local Variables.				
6	Form Elements.				
7	Introduction to Event Driven Programming.				
8	Dynamic Arrays.				
9	Linked Lists.				
10	Search and Sorting Algorithms.				
11th	Folders.				
12	Selection of appropriate structures in algorithms.				
13	Development of effective algorithms.				
14	Algorithmic Applications-I				
15	Algorithmic Applications-II				
General Competencies					
Student will be able to develop a software project.					
resources					

Cay S. Horstmann, "Big Java: Late Objects, Enhanced eText", 2nd Edition, Wiley, October 2016.
 TH Cormen, CE Leiserson, RL Rivest and C. Stein, "Introduction to Algorithms", MIT Press, 2009.

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	4	4	5	4	3	3	3	4	3
LO2	5	5	4	4	5	4	3	3	3	4	4
LO3	5	5	4	4	5	4	3	3	3	3	3
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

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
Algorithm and Programming 2	5	5	5	4	5	4	3	3	3	4	3