

Course Name	Course Code	Semester	T + P	Credit	ECTS
Programming with Java		4	3 + 0	3	4

Prerequisite Courses	None
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If the language of Code	Turkish
Course class	Technical Elective
If the Coordinator of Code	
Instructor	
Assistant Course	No
If the objective of Code	Basic Java (syntax and semantics, class creation and processing, graphical user interface programming, action-driven programming) and object-oriented programming (data abstraction, data encapsulation and code usage) is an introduction to the concept.
<b>Course Learning Output</b>	<p><b>The students completed the course:</b></p> <p>classes to model the behavior of real-world objects, you can define interfaces and methods.</p> <p>with a given interface can write Java classes and use.</p> <p>It can apply object-oriented programming paradigm in designing computer programs.</p> <p>You can understand and harness the mechanisms of action dealing with bugs in Java.</p> <p>Interactive graphical user interface with Java programs may take place.</p> <p>You can write Java programs to solve practical computational problems.</p>
<b>Contents Course</b>	<p>Java applications: simple programs, arithmetic, equality and relational operators. Java classes and objects: classes, objects, methods, local variables, primitive types, reference types, the dialog boxes. Control statements: Control structures, and multiple choice selection statements, repeat statements, logical operators. Methods: Static methods, method statement and invocation, argument promotion, value exchange, leaflets scope, method overloading. Arrays: Policy and creating arrays pass, multi-dimensional arrays. Classes and objects: Controlling access to members, constructors, reunion, sorting, garbage collection, final local variables. Heritage: Basic classes and sub-classes, protected members, constructors in subclasses, Object class. Polymorphism: Polymorphic behavior, abstract classes and methods, final methods and classes, creating and using interfaces. GUI components. Exception handling: Simple harness errors, mistakes hierarchy, finally block, stack unloading, error chain, error notification of new types. Files and streams: data hierarchy, File class, sequential-access text files, object serialization, random access files. Multi-use, multi-user with GUI.</p>

Weeks	Topics
1	Java Applications
2	Java Classes and Data Types
3	Control Statement
4	methods
5	Series
6	Classes and Objects
7	Heritage
8	MIDTERM
9	polymorphism
10	GUI components - I
11	GUI components - II

12	Graphics and Java 2D
13	Harness Fault Management
14	Files and Streams
15	FINAL EXAM

<b>General sufficiency</b>
Evaluation in, the students will be expected to develop software using the Java programming language.
<b>References</b>
<ul style="list-style-type: none"> <li>• Deitel, PJ Deitel, HM, 2012, Java How to Programming, 9th ed. , Prentice Hall., 1536 p.</li> <li>• Liang YD, 2005, Introduction to Java Programming, 5th ed. , Prentice Hall, 1314 p.</li> </ul>
<b>Assessment</b>
Midterm: 40% Final exam: 60% of the project or assignment can be made and announced at the beginning of the semester evaluations.