

## **Learn to Program in Java**

**Modality:** Self-Paced Learning

**Duration:** 40 Hours

**SATV Value:**

**CLC:**

**NATU:**

**SUBSCRIPTION:** Learn, Master

### **About this course**

Ready to start your programming journey? Being a software engineer is much more than simply writing code—it requires a strong conceptual understanding of computer science. In this course, which was developed through a combination of academic and industry perspectives, learn not only how to code in Java but also how to break down problems and implement their solutions using some of the most fundamental computer science tools.

Get plenty of hands-on Java coding experience with methods, logic, loops, variables, parameters, returns, and recursion. And write your code using industry-standard tools and practices to help you build strong habits as you grow your development skill set.

Whether you are preparing for advanced university computer science courses, an entry-level software engineering position, or the Advanced Placement Computer Science A exam, get the tools you need to succeed in this practical, self-paced Java course.

### **Course Objective:**

- Basic Java commands and APIs using industry tools
- Foundational data organization and manipulation
- Code control structures, such as loops and if/else statements
- How to structure code using methods, parameters, and returns

### **Audience:**

- Programmer

### **Prerequisite:**

- There are no prerequisite required for this course

### **Course Outline:**

#### **Module 1 | Java Basics**

- Introduction
- Writing your first Java program
- Basic Java Commands
- Data Types and Variables
- Interactive Programs
- Project Trip Planner
- Assessment

## **Module 2 | Control Structures**

- Introduction
- Logic
- Loop Basics
- More Loops
- Project Odds or Evens
- Assessment

## **Module 3 | Data Flow**

- Introduction
- Parameters
- Returns
- Data Processing Functions
- Recursion
- Project Crypto
- Assessment

## **Module 4 | Final Project**

- Final Project - Maze Runner?