



**Tel-Ran**  
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## BASIC PROGRAMMING COURSE STRUCTURE 2025

### PROGRAMMING LANGUAGE FUNDAMENTALS: PYTHON & JAVA

**88 hours**

Basics · Hardware and Software Architecture · Computer and Networking Basics · Software Infrastructure and Applications · Numbering Systems Notation · Open Source and Open Standards · Development Platforms · Integrated Development Environment (IDE) Basics · Compiler and Builder · Programming Language Basics · Data Types · Operators · Statements · Functions · Symbol Presentation and Coding · Array · Basic Programming Patterns · Practicing · Sequential and Binary Search · Sorting · Reversing · Merging · Object-Oriented Programming (OOP Principles: Encapsulation, Inheritance) · Polymorphism · Classes and Objects · Practicing in Python and Java

\* — *Tel-Ran Educational Center may adjust program content based on technology updates while maintaining the total study hours. Changes may occur without prior notice to students.*

\*\* — *Free Webinars: Additional free webinars are held regularly, covering topics discussed in class and providing homework analysis.*