

# Object-Oriented Concepts in Java – Advanced («JAVA03»)

In this course you will learn the advanced object-oriented concepts of the Java programming language. You will get an overview of their versatile application possibilities.

**Duration:** 2 days

**Price:** 1'350.–

**Course documents:** Digicomp Courseware

## Content

1. Implementation inheritance
  - Supertypes and Subtypes
  - Modelling
  - Hierarchy
2. Subclasses
  - Declaration
  - Inherited methods
3. Overwriting
  - Overwriting methods
  - Overwritten Methods
  - Vertical constructor concatenation
4. Polymorphism
  - Substitution
  - Instance check for classes
  - Type Conversion for classes
5. Privacy screen
  - Access modifiers
  - Rules for inheritance
6. Overlapping
  - Covered fields
  - Covered methods
7. Abstract
  - Abstract Methods
  - Abstract Classes
8. Finales
  - Final Variables
  - Final Methods
  - Final Classes
9. Interface inheritance
  - Supertypes and Subtypes
  - Modelling
  - Hierarchy
10. Interfaces
  - Declaration
  - Multiple inheritance
11. Implementation classes
  - Declaration
  - Implementing Methods
  - Instance check for interfaces
  - Type conversion for interfaces and classes
  - Multiple inheritance
  - Type conversion for interfaces

- 12. Return types
  - Invariance
  - Covariance

## Key Learnings

- Learning advanced object-oriented concepts of the Java programming language

## Target audience

This course is aimed at programmers who already know the basics of object-oriented concepts of the Java programming language and want to deepen their knowledge.

## Requirements

Attendance of the following course or equivalent knowledge is required:

- [Object-oriented concepts in Java – Basics \(«JAVA02»\)](#)

## Further courses

- [Application Development with Java – Basics \(«JAVA04»\)](#)

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-software-engineering/programming-languages/java-javascript/course-object-oriented-concepts-in-java-advanced](http://www.digicomp.ch/courses-software-engineering/programming-languages/java-javascript/course-object-oriented-concepts-in-java-advanced)