

# Application Development with Java – Advanced («JAVA05»)

Expand your basic knowledge of application development with the Java programming language to advanced concepts! In this course you will get an overview of its versatile application possibilities.

**Duration:** 2 days

**Price:** 1'350.–

**Course documents:** Digicomp Courseware

## Content

1. Singleton Pattern
  - Description of the
  - Modelling
2. Builder Pattern
  - Description
  - Modelling
3. Introspection
  - Class object
  - Class java.lang.Class
  - Class java.lang.Package
  - Interface java.lang.reflect.Type
  - Interface java.lang.reflect.Member
  - Class java.lang.reflect.AccessibleObject
  - Class java.lang.reflect.Field
  - Class java.lang.reflect.Executable
  - Class java.lang.reflect.Constructor
  - Class java.lang.reflect.Method
  - Class java.lang.reflect.parameter
  - Class java.lang.reflect.Modifier
4. Numbers and Currencies
  - Class java.lang.Math
  - Class java.math.BigInteger
  - Class java.math.BigDecimal
  - Class java.util.Currency
5. Dates and Times
  - Class java.util.Date
  - Class java.util.Calendar
  - Class java.util.GregorianCalendar
  - Interface java.time.temporal.Temporal
  - Class java.time.Instant
  - Class java.time.LocalDate
  - Class java.time.LocalTime
  - Class java.time.LocalDateTime
  - Class java.time.ZoneId
  - Class java.time.ZoneOffset
  - Class java.time.ZonedDateTime
  - Class java.time.OffsetDateTime
  - Interface java.time.temporal.TemporalAmount
  - Class java.time.Period
  - Class java.time.Duration
  - Interface java.time.temporal.TemporalUnit
  - Enumeration java.time.temporal.ChronoUnit

- Class `java.time.format.DateTimeFormatter`
- Enumeration `java.time.format.FormatStyle`
- 6. Lists
  - Interface `java.util.List`
  - Class `java.util.AbstractList`
  - Class `java.util.ArrayList`
- 7. Quantities
  - Interface `java.util.Set`
  - Class `java.util.AbstractSet`
  - Class `java.util.HashSet`
- 8. Pictures
  - Interface `java.util.Map`
  - Interface `java.util.Map.Entry`
  - Class `java.util.AbstractMap`
  - Class `java.util.HashMap`
  - Lambdas and Closures
  - Functional interfaces
- 9. Lambda expressions
  - Annotation `java.lang.FunctionalInterface`
  - Filter algorithms
  - Execution algorithms
  - Transformation algorithms
  - Generation algorithms
  - Method references

## Key Learnings

- Understanding the advanced application development process using the Java programming language

## Target audience

This course is aimed at programmers who already know the basic procedure for application development with the Java programming language and now want to deepen their knowledge.

## Requirements

Attendance of the following course or equivalent knowledge is required:

- [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-application-development-with-java-advanced](http://www.digicomp.ch/courses-software-engineering/programming-languages/java-javascript/course-application-development-with-java-advanced)