

Basics of Programming («JVP»)

In this course, you will gain an overview of the generally valid basic elements of computer programs. Using the Java language, you will be systematically familiarized with the rules and basic features of object-oriented programming.

Duration: 2 days

Price: 1'400.–

Course documents: Digicomp Courseware

Content

1. Introduction

- Java History
- Java

2. Coding

- Truth value
- Integer
- Decimal number
- Character
- Text

3. Simple application

- Program
- Program entry
- Source file
- Program compilation
- Program call
- Program argument
- Program output
- Program comment
- Program exit

4. Data types

- Value type versus reference type
- Value range
- Literal
- Memory management

5. Variables

- Vocabulary and identifiers
- Declaration and initialization
- Block and scope

6. Arrays

- Representation
- Declaration
- Construction
- Length
- Access
- Initialization
- Enumeration

7. Compound types

- Declaration
- Access

8. Operators

- Assignment operation

- Arithmetic operation
- Concatenation operation
- Comparison operation
- Logic operation
- Conditional operation
- compound operation
- Evaluation sequence

9. Branches

- Types
- Condition structure
- Alternative structure
- Multiple selection
- Case differentiation

10. Loops

- Types
- Pre-check loop
- Post-check loop
- Counting loop
- Collection loop

11. Object orientation

- What is an object?
- What is an attribute?
- What is an operation?
- What is a message?
- What is a parameter?
- What is an argument?
- What is a class?
- Modeling

Key Learnings

- Understanding how a computer program works
- Solid basic knowledge of programming, regardless of the programming language later used
- Knowledge of the basic elements of the Java programming language

Target audience

This course is aimed at budding programmers and users who want to learn the basics of programming and intend to learn the Java programming language later.

Further courses

- [Introduction to Programming with Python \(«PYTHON»\)](#)
- [Introduction to JavaScript \(«JSC»\)](#)
- [Fundamental Language Elements of Java \(«JAVA01»\)](#)
- [Introduction to PHP \(«PHP»\)](#)

Any questions?

We are happy to advise you on +41 44 447 21 21 or info@digicomp.ch. You can find detailed information about dates on www.digicomp.ch/courses-software-engineering/programming-languages/java-javascript/course-basics-of-programming