

# Java & QA Automation (30 h)

## 1. Java - 14h

- a. Configuring the working environment
- b. Creating the first Java program
- c. Variables and primitive data types
- d. If-else block structures
- e. Loops – for
- f. Loops – while
- g. Loops – do-while
- h. Object-Oriented Programming (OOP)
- i. Classes
- j. Fields
- k. Constructors
- l. Methods
- m. Return values
- n. Strings
- o. Arrays
- p. Inheritance
- q. Encapsulation
- r. Abstraction
- s. Polymorphism
- t. Generic Types, Collections and Maps
- u. Exceptions
- v. Introduction to Design Patterns

## 2. Junit and TestNG 2x3h = 6h

## 3. Selenium WebDriver 2x3h = 6h

- a. Locators
- b. XPath good practices for creation (id, CSS, etc)
- c. WebDriver
- d. Page Object Model
- e. Lazy Loading
- f. WEB driver manager
- g. Page factory
- h. Reporting frameworks

## 4. CI/CD DevOps best practices 2h

## 5. Testing Web APIs - 2h