

---

## Java SE 8 Fundamentals

- **Formato do curso:** Presencial
- **Localidade:** Lisboa
- **Data:** 23 Set. 2019 a 27 Set. 2019
- **Preço:** 1585€
- **Promoção:** -75€  
Aproveite 75€ de desconto se se inscrever até 31 de agosto!
- **Horário:** Laboral - das 09h30 às 17h00
- **Nível:** Iniciado
- **Duração:** 30 horas

Este curso introduz a programação orientada a objectos usando a linguagem Java.

---

### Destinatários

Para quem quer construir aplicações Java, nomeadamente:

- Application Developers
  - Developer
  - Project Manager
  - System Administrator
  - Team Leader
  - Technical Administrator
  - Technical Consultant
  - Web Administrator
- 

### Pré-requisitos

Conhecimentos de algoritmia e programação em qualquer linguagem.

---

### Objectivos

- Usar Java para desenvolver uma aplicação.
- Usar métodos e ciclos para ditar fluxo do programa

- Entender conceitos de objectos tais como herança, encapsulamento e abstração
  - Usar tratamento de erros
  - Definir modificação de dados através de expressões lambda para a classe Collections
- 

## Programa

### What Is a Java Program?

- Introduction to Computer Programs
- Key Features of the Java Language
- The Java Technology and Development Environment
- Running/testing a Java program

### Creating a Java Main Class

- Java Classes
- The main Method

### Data In the Cart

- Introducing variables
- Working with Strings
- Working with numbers
- Manipulating numeric data

### Managing Multiple Items

- Working with Conditions
- Working with a List of Items
- Processing a list of items

### Describing Objects and Classes

- Working with objects and classes
- Defining fields and methods
- Declaring, Instantiating, and Initializing Objects
- Working with Object References
- Doing more with Arrays
- Introducing the NetBeans IDE
- Introducing the Soccer League Use Case

### Manipulating and Formatting the Data in Your Program

- Using the String Class
- Using the Java API Docs
- Using the String
- Builder Class

- More about primitive data types
- The remaining numeric operators
- Promoting and casting variables

### **Creating and Using Methods**

- Using methods
- Method arguments and return values
- Static methods and variables
- How Arguments are Passed to a Method
- Overloading a method

### **Using Encapsulation**

- Access Control
- Encapsulation
- Overloading constructors

### **More on Conditionals**

- Relational and conditional operators
- More ways to use if/else constructs
- Using Switch Statements
- Using the NetBeans Debugger

### **More on Arrays and Loops**

- Working with Dates
- Parsing the args Array
- Two-dimensional Arrays
- Alternate Looping Constructs
- Nesting LoopsThe Array
- List class

### **Using Inheritance**

- Overview of inheritance
- Working with subclasses and superclasses
- Overriding methods in the superclass
- Introducing polymorphism
- Creating and extending abstract classes
- Using Interfaces
- Polymorphism in the JDK foundation classes

### **Using Interfaces**

- Using the List Interface
- Introducing Lambda expressions

## Handling Exceptions

- Handling Exceptions: An overview
- Propagation of exceptions
- Catching and throwing exceptions
- Handling multiple exceptions and errors