

# Course : Oracle Certified Professional, Java SE 21 Developer, certification preparation

Practical course - 4d - 28h00 - Ref. OZT

Price : 2110 € E.T.

★★★★★ 5 / 5

NEW

This course aims to prepare candidates for the Oracle Java SE 21 certification exam and update their knowledge of Java, focusing on the complex aspects of the language and the main libraries.

## Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Programming with abstract classes and methods
- ✓ Master query creation and read database results
- ✓ Managing date- and time-related events
- ✓ Using Java APIs

## Intended audience

Application developers.

## Prerequisites

A good command of the Java language is imperative.

## Practical details

### Hands-on work

Theoretical sessions are followed by mock tests to prepare for the exam.

### Teaching methods

Active pedagogy encouraging personal involvement and exchanges between participants.

## Course schedule

### PARTICIPANTS

Application developers.

### PREREQUISITES

A good command of the Java language is imperative.

### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

## 1 The language

- Primitive types and envelope classes.
- Enumerations.
- Statements, expressions, instructions.
- Blocks, conditional structures and loops.
- Modifiers and operators.
- Exception handling.
- Switch expressions.
- Annotations.
- Pattern matching.

### Hands-on work

## 2 Object concepts

- Classes and instances.
- Inheritance, polymorphism, encapsulation.
- Hierarchy control with sealed classes.
- Overloading and redefining methods.
- Type comparison, casting.
- hashCode(), equals(), finalize() and toString().
- Create immutable classes with records.

### Hands-on work

## 3 Utility classes

- String, StringBuilder and text blocks.
- Create, delete and manipulate files. API NIO 2.
- Object serialization.
- Read and write to the console.
- API Collections and genericity. Sorting with Comparable and Comparator.
- Constrained parameterized types. Use of wildcards.

### Hands-on work

## 4 Location features

- Locale and ResourceBundle classes.
- Text formatting (numbers, dates, etc.).
- Currency management.
- Local dates and times.
- Time zones and daylight saving time.

### Hands-on work

## 5 Java Platform Module System

- The value of modules.
- The syntax of module-info.java.
- The high-level java.util.concurrent.
- Virtual threads.

### Hands-on work

#### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

#### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

## 6 Concurrent programming

- Processes and threads.
- Control thread execution.
- The high-level java.util.concurrent.
- Virtual threads.

### Hands-on work

Live coding: programming and interaction.

## 7 Functional programming

- Lambda expressions.
- Method references.
- Functional interfaces.
- API Stream.

### Hands-on work

Intensive training on sample questions from the certification exam.

## Options

### Certification : 330€ HT

This training includes the voucher needed to register and take the 1Z0-830 certification exam with Oracle's partner, Pearson Vue. The exam lasts 120 minutes, and includes 50 multiple-choice questions. The minimum score for certification is 68%.

## Dates and locations

### REMOTE CLASS

2026 : 24 Mar., 16 June, 29 Sep., 15 Dec.

### PARIS LA DÉFENSE

2026 : 17 Mar., 9 June, 22 Sep., 8 Dec.