

Szkolenie: Oracle
Java SE 7 Programming

FORMA SZKOLENIA	MATERIAŁY SZKOLENIOWE	CENA	CZAS TRWANIA
Stacjonarne	Cyfrowe	4950 PLN NETTO*	5 dni
Stacjonarne	Tablet CTAB	5550 PLN NETTO*	5 dni
Metoda dlearning	Cyfrowe	4950 PLN NETTO*	5 dni
Metoda dlearning	Tablet CTAB	4950 PLN NETTO*	5 dni

* (+VAT zgodnie z obowiązującą stawką w dniu wystawienia faktury)

LOKALIZACJE

Kraków - ul. Tatarska 5, II piętro, godz. 9:00 - 16:00

Warszawa - ul. Bielska 17, godz. 9:00 - 16:00

Cel szkolenia:

This **Java SE 7 Programming** training covers the core Application Programming Interfaces (API) you'll use to design object-oriented applications with Java. Expert Oracle University instructors will teach you how to write database programs with JDBC

Plan szkolenia:

- Java Platform Overview
 - Introductions
 - Course Schedule
 - Java Overview
 - Java Platforms
 - OpenJDK
 - Licensing
 - Java in Server Environments
 - The Java Community Process
- Java Syntax and Class Review
 - Simple Java classes
 - Java fields, constructors and methods
 - Model objects using Java classes

- Package and import statements
- Encapsulation and Polymorphism
 - Encapsulation in Java class design
 - Model business problems with Java classes
 - Immutability
 - Subclassing
 - Overloading methods
 - Variable argument methods
- Java Class Design
 - Access modifiers: private, protected and public
 - Method overriding
 - Constructor overloading
 - The instanceof operator
 - Virtual method invocation
 - Polymorphism
 - Casting object references
 - Overriding Object methods
- Advanced Class Design
 - Abstract classes and type generalization
 - The static and final modifiers
 - Field modifier best practices
 - The Singleton design pattern
 - Designing abstract classes
 - Nested classes
 - Enumerated types
- Inheritance with Java Interfaces
 - Java Interfaces
 - Types of Inheritance
 - Object composition and method delegation
 - Implementing multiple interfaces
 - The DAO design pattern
- Generics and Collections
 - Generic classes and type parameters
 - Type inference (diamond)
 - Collections and generics
 - List, set and Map

- Stack and Deque
- String processing
 - String manipulation with StringBuilder and StringBuffer
 - Essential String methods
 - Text parsing in Java
 - Input processing with Scanner
 - Text output and formatting
 - Regular expressions with the Pattern and Matcher classes
- Exceptions and Assertions
 - Exceptions categories
 - Standard Java Exception classes
 - Creating your own Exception classes
 - Using try-catch and the finally clause
 - Using try-with-resources and the AutoCloseable interface
 - The multi-catch feature
 - Best practices using exceptions
 - Assertions
- I/O Fundamentals
 - I/O using Java
 - Reading the console input stream
 - Writing to the console
 - Using I/O Streams
 - Chaining I/O Streams
 - Channel I/O
 - Reading and writing objects using Serialization
- File I/O with NIO 2
 - The Path interface
 - The Files class
 - Directory and File operations
 - Managing file system attributes
 - Reading, writing, and creating files
 - Watching for file system changes
- Threading
 - Operating system task scheduling
 - Recognizing multithreaded environments
 - Creating multi-threaded solutions

- Sharing data across threads
- Synchronization and Deadlock
- Immutable objects
- Concurrency
 - Creating Atomic variables
 - Using Read-Write Locks
 - Thread-safe collections
 - Concurrent synchronizers (Semaphore, Phaser, and others)
 - Executors and ThreadPools to concurrently schedule tasks
 - Parallelism and the Fork-Join framework
- Database Application with JDBC
 - Layout of the JDBC API
 - JDBC drivers
 - Queries and results
 - PreparedStatement and CallableStatement
 - Transactions
 - RowSet 1.1 RowSetProvider and RowSetFactory
 - The DAO Pattern and JDBC
- Localization
 - Advantages of localization
 - Defining locale
 - Read and set locale using the Locale object
 - Resource bundles
 - Format messages, dates and numbers

Wymagania:

- Experience with at least one programming language
- Understand object-oriented principles
- Basic understanding of database concepts and SQL syntax
- Have completed the [Java SE 7 Fundamentals](#) course, or experience with the Java language - can create, compile and execute programs

Poziom trudności



Certyfikaty:

Uczestnicy szkoleń otrzymają zaświadczenia o ukończeniu kursu sygnowane przez firmę Oracle.

Prowadzący:

Autoryzowany wykładowca Oracle.