

# Core Java

**Duration :30 hrs**

## **1. Introduction to Java**

- History of Java
- Features of Java

## **2. Overview of Java**

- OOP's Concept
- Data types and Variables
- Control Structures
- Strings, Arrays

## **3. Objects and Classes**

- Object, Classes and Methods
- Method Overloading
- Constructors
- Object class

## **4. Inheritance**

- Types of Inheritance
- Method Overriding
- Dynamic method dispatch

## **5. Packages and Interfaces**

- Defining Packages
- Extending Interfaces

## **6. Exception Handling**

- Fundamentals of Exception Handling
- Exception types
- Try and Catch and finally
- Throw, throws
- Custom Exception

## **7. String Handling**

- Creating Strings
- String handling methods
- String Buffer and String Builder

## **8. Input and Output in Java**

- Byte streams & Character streams
- File
- Serialization

## **9. Collection Framework**

- Collection Interfaces and Classes
- Iterators
- Comparators

## **10. Lambda Built-in Functional Interfaces**

- Use primitive versions of functional Interface
- java.util.function package
- Use binary versions of functional Interface
- Use the UnaryOperator Interface

## **12. Stream API**