

Since 2007, Making IT Experts & Products

## Course: Java Course

Duration: 100 Hrs (Changeable) | Fees: Individual / Batch

Since 2007, Nestsoft TechnoMaster has been providing training, internships, and services in IT technologies, both online and offline, with the expertise of **over 250 industry experts**. We have delivered internships, training, and seminars to more than 50,000 students, resulting in numerous success stories. **We offer 100% placement support through JobsNEAR.in**

### Our Courses/Internship

- Python/Django Fullstack
- Artificial Intelligence
- Machine Learning
- Data Science
- Software Testing (All)
- Wordpress, Woocommerce
- Digital Marketing, SEO
- Php/MySQL, Laravel
- Flutter, Android, IOS
- Asp.net MVC
- Web Design, Javascript
- Angular JS, React JS
- CCNA, MCSA, CCNP
- AWS, GCP, Azure
- Odoo, Salesforce, Sap
- Microsoft Excel
- Ethical Hacking



Syllabus on the Next Page ..



Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

+91 9895490866

+91 8301010866

join@nestsoft.com

www.nestsoft.com

### Module 1: Basics of Java


- \* Introduction
- \* History
- \* Features of Java
- \* Types of Java Application
- \* Difference between JVM,JRE and JDK
- \* Simple Java Program
- \* Variables and Data types
- \* Methods-Declaration, definition and Calling
- \* Packages
- \* Access modifiers
- \* Reading from Console using Scanner
- \* Java Arrays
- \* Operators and Operator precedence
- \* Conditional and Looping Statements
- \* Basic Java Programs

### Module 2: String Handling in Java

- \* String class Introduction
- \* Immutable String
- \* Methods of String Class
- \* String Comparison
- \* String Concatenation
- \* String Buffer Class

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

 +91 9895490866

 +91 8301010866

 [join@nestsoft.com](mailto:join@nestsoft.com)

 [www.nestsoft.com](http://www.nestsoft.com)

- \* String Builder Class

- \* Mutable String

- \* toString method

## **Module 3: Wrapper Classes**

- \* Wrapper classes

- \* Autoboxing

- \* Unboxing

## **Module 4: OOPS Concepts**

- \* OOPs Concepts Introduction

- \* Object and class

- \* Static keyword

- \* Constructor

- \* this keyword

- \* Inheritance

- \* Aggregation and Composition

- \* super Keyword

- \* Interface

- \* Polymorphism


## **Module 5: Exception Handling**


- \* Exception Handling Introduction

- \* try and catch block


- \* Multiple catch block

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

 +91 9895490866

 +91 8301010866

 [join@nestsoft.com](mailto:join@nestsoft.com)

 [www.nestsoft.com](http://www.nestsoft.com)

- \* Nested try
- \* finally block
- \* throw keyword
- \* throws keyword
- \* Exception Handling with Method Overriding
- \* Custom Exception

## Module 6: Multithreading

- \* Multi threading Introduction
- \* Multi threading vs Multiprocessing
- \* Life Cycle of a Thread
- \* Creating a Thread
- \* Thread Class
- \* Runnable Interface
- \* Thread class methods
- \* Thread Scheduler
- \* Thread Priority
- \* Daemon Thread
- \* Thread Pooling
- \* Thread Group
- \* Performing multiple task by multiple thread

## Module 7: Synchronization

- \* What is Synchronization and Why?

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

☎ +91 9895490866

☎ +91 8301010866

✉ [join@nestsoft.com](mailto:join@nestsoft.com)

🌐 [www.nestsoft.com](http://www.nestsoft.com)

- \* Synchronized method
- \* Synchronized block
- \* Static synchronization
- \* Deadlock

## **Module 8: Garbage Collection**

- \* What is garbage collection?
- \* finalize method

## **Module 9: AWT and Event Handling**

- \* AWT Controls
- \* Event Handling by 3 ways
- \* Event classes and Listener Interfaces
- \* Adapter classes

## **Module 10: Layout Managers**

- \* Basics of Swing
- \* Swing features
- \* Advantages of swing over AWT
- \* Swing Components
- \* Digital Watch
- \* Graphics in swing
- \* Displaying Image
- \* Open Dialog Box
- \* Drawing paintings

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

☎ +91 9895490866

☎ +91 8301010866

✉ join@nestsoft.com

🌐 www.nestsoft.com

- \* Creating applications

### **Module 11: Applet**


- \* Applet features
- \* Life Cycle of Applet
- \* Graphics in Applet
- \* Displaying image in Applet
- \* Animation in Applet
- \* Event Handling in Applet
- \* J Applet class
- \* Painting in Applet
- \* Creating Animations

### **Module 12: Collection**


- \* Collection Framework
- \* Array List class
- \* Linked List class
- \* List Iterator interface
- \* Hash Set class
- \* Linked Hash Set class
- \* Tree Set class
- \* Priority Queue class
- \* Map interface
- \* Hash Map class

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

 +91 9895490866

 +91 8301010866

 [join@nestsoft.com](mailto:join@nestsoft.com)

 [www.nestsoft.com](http://www.nestsoft.com)

- \* Linked Hash Map class
- \* Tree Map class
- \* Hash table class

### **Module 13: Java Updated Features**

- \* Functional Interface and Lambda Expression
- \* Java Stream API for Bulk Data Operations on Collections
- \* Java Time API

### **Module 14: SQL**


- \* Introduction
- \* Basic SQL Queries
- \* DDL,DML and DCL
- \* Aggregation in SQL
- \* Joining tables
- \* Subqueries

### **Module 15: JDBC**

- \* JDBC Drivers
- \* Steps to connect to the database
- \* Connectivity with Oracle, MySQL and Access
- \* Driver Manager
- \* Connection interface
- \* Statement interface
- \* Result Set interface

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

 +91 9895490866

 +91 8301010866

 [join@nestsoft.com](mailto:join@nestsoft.com)

 [www.nestsoft.com](http://www.nestsoft.com)

- \* Prepared Statement
- \* JDBC New Features
- \* Mini Project using swing and JDBC

## **Module 16: Web Technology**

- \* HTML 5
- \* Introduction to HTML
- \* HTML Tags
- \* Lists
- \* Forms creation
- \* Creating tables
- \* Managing home page
- \* CSS
- \* Introduction to CSS
- \* Three ways to use CSS
- \* CSS selectors
- \* CSS Properties
- \* Designing website
- \* JavaScript
- \* Introduction to JavaScript
- \* Syntax
- \* Three ways to use JavaScript
- \* Variables

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

☎ +91 9895490866

☎ +91 8301010866

✉ [join@nestsoft.com](mailto:join@nestsoft.com)

🌐 [www.nestsoft.com](http://www.nestsoft.com)



- \* Data types
- \* Operators
- \* Conditional and Looping Statements
- \* Functions
- \* Working with events
- \* Client-side Validation
- \* jQuery
- \* Introduction to jQuery
- \* jQuery syntax
- \* Example program
- \* jQuery selectors
- \* jQuery Effects
- \* jQuery Events
- \* Validation using jQuery
- \* jQuery Forms
- \* jQuery Examples
- \* AJAX
- \* Introduction to AJAX
- \* Servlet and JSP with AJAX
- \* Interacting with database

## **Module 17: Server Side Programming**

- \* Servlet

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

☎ +91 9895490866

☎ +91 8301010866

✉ [join@nestsoft.com](mailto:join@nestsoft.com)

🌐 [www.nestsoft.com](http://www.nestsoft.com)

- \* Servlet introduction
- \* Basics of Web
- \* Servlet vs CGI
- \* Servlet API
- \* Servlet Interface
- \* Generic Servlet
- \* Http Servlet
- \* Servlet Life Cycle
- \* How servlet works?
- \* Servlet Request
- \* Servlet Request methods
- \* Registration example with DB
- \* Request Dispatcher
- \* send Redirect
- \* Servlet Config
- \* Servlet Config methods
- \* Attribute
- \* Session Tracking
- \* URL Rewriting
- \* HTTP Session
- \* JSP
- \* Basics of JSP

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

☎ +91 9895490866

☎ +91 8301010866

✉ [join@nestsoft.com](mailto:join@nestsoft.com)

🌐 [www.nestsoft.com](http://www.nestsoft.com)

- \* Life cycle of JSP
- \* JSP API
- \* Scripting elements
- \* scriptlet tag
- \* expression tag
- \* declaration tag
- \* 9 Implicit Objects
- \* Directive Elements
- \* Exception Handling
- \* Action Elements
- \* Expression Language
- \* MVC in JSP
- \* JSTL
- \* Custom tags
- \* Interacting with database
- \* Project Development in JSP

## Module 18: Hibernate

- \* Hibernate Configuration using XML and annotation.
- \* Hibernate CRUD operation
- \* Hibernate Query Language
- \* Mapping One to One
- \* One to many

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

+91 9895490866

+91 8301010866

join@nestsoft.com

www.nestsoft.com

- \* Many to one
- \* Many to Many
- \* Fetching types

## Module 19: Spring Framework

- \* Basics of Spring
- \* Spring with ORM
- \* Spring 3 MVC
- \* Login and Logout Application
- \* CRUD Functions
- \* Main Project
- \* Spring Boot

(Click on Course for more details)

**Course: Java Course**

**Duration: 100 Hrs (Changeable) | Fees: Individual / Batch**

**- Thank You -**

N.B: This syllabus is not final and can be customized as per requirements / updates.

Our Head Office: Nestsoft TechnoMaster, Infopark, Cochin - 42, Kerala, India

+91 9895490866

+91 8301010866

join@nestsoft.com

www.nestsoft.com