Placement Shiksha

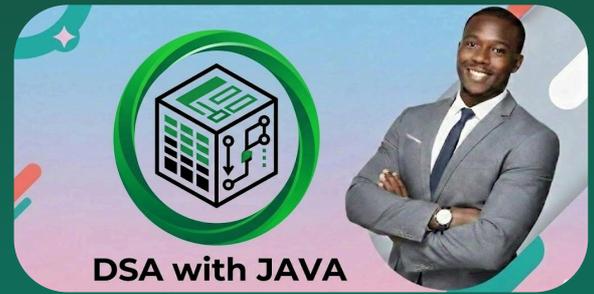# CONTENT

DevOps Online Training Course

DSA with Java Master's Program is an elite training ground designed to turn you into a top-tier problem solver. While AI builds the interface, DSA builds the engine. This program is meticulously crafted for those aiming for FAANG and high-growth product-based startups.

You won't just learn to code; you will learn to think in complexities, optimize every byte of memory, and write industrial-grade, high-performance algorithms.

DSA with JAVA

Why DSA with Java?

1 Million+
Jobs Worldwide

$ 25.5 Billion
expected market growth

120%
average annual growth

₹25-65 LPA
average annual salary of an DevOps expert

Tools We Learn

Java   Gradle   sonarlint

LeetCode   JUnit 5   git   GitHub   IJ

eclipse   Maven
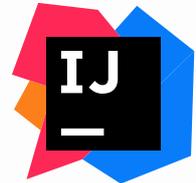
Key Features

500+ Curated Problems:
Solve a structured roadmap of questions from FAANG.

Logic—Building Workshops:
Memorizing code to master the "Why" behind every algorithm.

Weekly Coding Sprints:
Timed mock contests to simulate high—pressure technical interview .

Expert Code Reviews:
Get personalized feedback on your code's time and space complexity.

The Complete DSA Course

Module 1:

Java Fundamentals for DSA

Topics:

- Java Syntax and Memory Management
- Classes, Objects, and Access Modifiers
- Interface vs. Abstract Classes in Java
- Java Collections Framework Overview
- Exception Handling and Debugging
- Mastering the Java Virtual Machine (JVM)

Module 2:

Complexity Analysis & Basics

Topics:

1. Big O, Big Omega, and Big Theta Notations
2. Time and Space Complexity Trade−offs
3. Best, Average, and Worst Case Analysis
4. Analysis of Iterative and Recursive Loops
5. Master Theorem for Recurrence Relations
6. Sorting and Searching Algorithm Basics

Module 3:

Linear Data Structures

Topics:

- Arrays: Multi−dimensional and Dynamic Arrays
- Singly, Doubly, and Circular Linked Lists
- Stack: Implementation using Arrays
- Queue: Priority Queues and Deque
- Hashing: HashMaps and Collision Handling
- Strings: Pattern Matching & KMP Algorithm

Module 4:

Recursion & Backtracking

Topics:

- Fundamentals of Recursive Thinking
- Tail Recursion vs. Tree Recursion
- Divide and Conquer Methodologies
- Backtracking: N−Queens and Sudoku Solver
- Generating Subsets and Permutations
- Recursive Space Complexity Analysis

The Complete DSA Course

Module 5:

Non−Linear Data Structures

Topics:

- Binary Trees: Properties and Traversals
- Binary Search Trees: CRUD Operations
- AVL Trees and Red−Black Tree Concepts
- Segment Trees and Fenwick Trees
- Heap Data Structure and Heap Sort
- Trie: Implementation and Prefix Search

Module 7:

Advanced Graph Theory

Topics:

- BFS and DFS: Graph Traversals
- Shortest Path: Dijkstra and Bellman−Ford
- Minimum Spanning Trees: Prim's and Kruskal's
- Topological Sorting and DAGs
- Cycle Detection in Directed & Undirected Graphs
- Strongly Connected Components (Tarjan's)

Module 6:

Dynamic Programming

Topics:

- Memoization vs. Tabulation Approaches
- 1D DP: Fibonacci and Climbing Stairs
- 2D DP: Knapsack and Matrix Chain Multiplication
- DP on Strings: Longest Common Subsequence
- DP on Trees and Bitmasking Techniques
- Optimization Techniques in DP Problems

Module 8:

Competitive Programming & LLD

Topics:

- Sliding Window & Two−Pointer Techniques
- Greedy Algorithms and Huffman Coding
- Bit Manipulation and Math for Coding
- Low−Level Design Principles
- Design Patterns for Technical Interviews
- Mock Interview: Cracking the Google/ Amazon Style

DSA Course Learnings

- Solve complex problems using the efficient data structures.

- Reduce code execution time and memory usage.

- Master the Java Collections Framework for enterprise coding.

- Implement advanced patterns like DP, Greedy & Backtracking.

- Write clean, ready code using SOLID & LLD principles.

What roles you can play?

Software Development Engineer: Design and build scalable software solutions for global product companies to ensure smooth functionality.

System Architect: Orchestrates the entire robust technical infrastructures using Low–Level and High–Level Design principles.

Backend Developer: Specialized in cloud platforms, Architect high–performance server–side logic and manage data flow efficiency.

Technical Lead: Focuses on managing engineering teams by ensuring code quality and algorithmic efficiency across projects.

Competitive Programmer: Solve high–level algorithmic challenges in global coding competitions and hackathons.

R&D Engineer: Provides expert consultation and work on cutting–edge research and optimization in fields like Search Engines and AI.

CERTIFICATION

Certificate
OF COMPLETION

THIS CERTIFICATE IS PRESENTED TO

Olivia Wilson

has completed **SOFTWARE ENGINEERING PROGRAM** from PlacementShiksha, For 6 Months and learned Data Structures & Algorithms (DSA). We acknowledge the dedication and effort that has gone into meeting all the requirements of this program.

Completed On: 15th August 2025

MOHAMMAD

Co-Founder | Placement Shiksha

4.9 Average Rating

6500+ students got job

45000+ Satisfied Learners

800+ Qualified trainers

Our Alumni WORK at

ORACLE amazon Infosys® SAMSUNG
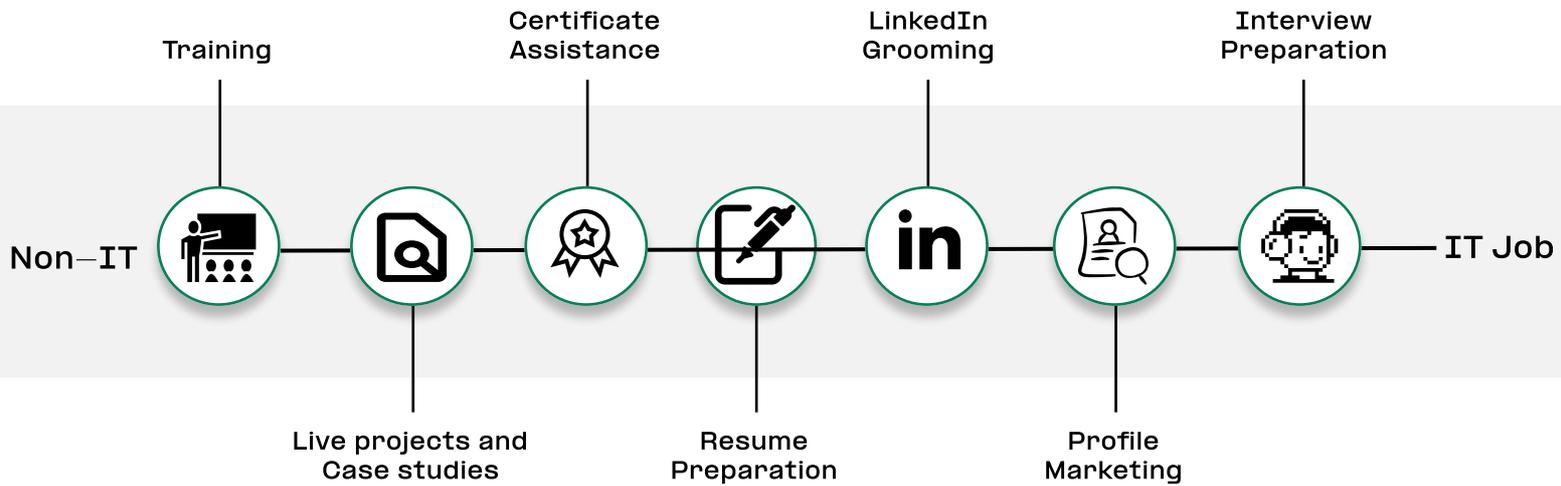
IBM tcs Google acer Red Hat

Microsoft CISCO NETFLIX accenture

Placement Shiksha

Our Students Lifecycle

Training

Certificate
Assistance

LinkedIn
Grooming

Interview
Preparation

Non—IT

IT Job

Live projects and
Case studies

Resume
Preparation

Profile
Marketing

Who can Apply For Our Courses?

This course suggests an intensive "bootcamp" style approach, designed to take a student from basic coding to "job—ready" status by combining theoretical computer science with modern, industry—standard tools.

Professionals who want to upskill.

Freshers who want to get IT Jobs.

Managers who want to learn tech skills.

Aspirants who want to get into IT from Non IT.

What Make Us
Unique

800+
Qualified Trainers

300+
Hiring partners

90%
average annual salary hike

7500+
Students got placed

Our
Career Services

Industry-First Curriculum:
Bridging the gap between academia and real-world engineering.

Architectural Focus:
Learning to build scalable systems rather than just writing code.

Dual Core Mastery:
Prioritizing both DSA and System Design as your career foundation.

Career-Ready Rigor:
Ensure you ace top-tier technical interviews.

Specialized Electives:
Nine distinct paths, from GenAI to DevOps, to tailor your career.

Holistic Tech Exposure:
A 360-degree view of the lifecycle, from backend to leadership.

Intensive 6-Month Sprint:
Condensing years of experience into one high-impact semester.

Outcome-Driven Learning:
Education designed with the singular goal of placement.

Our other paid Services

1-on-1 Mentorship:
Personalized, bi-weekly strategy sessions with senior engineers from top tech firms.

Elite Referral Network:
Direct access and internal referrals to 200+ partner companies and startups.

Mock Interview Loops:
Simulated technical and behavioral rounds with real-time feedback from experts.

Portfolio Audit:
Professional review of your GitHub and projects to ensure they meet production standards.

Lifetime Alumni Access:
Ongoing entry to our private community, job boards, and updated course materials.

Resume & LinkedIn Polish:
Expert optimization of your professional profiles to beat automated ATS filters.

HOW TO
ENROLL WITH US?

01
You can check our website and book a demo

02
Leave your contacts for us and we will reach you.

03
Call or leave a message on Whataspp anytime

Ishaan
★★★★★

"The placement training at Placent Shiksha was a game-changer for me. The instructors are highly skilled and helped me bridge the gap between academic knowledge and industry requirements. I'm now successfully placed in a top-tier firm!"

Arjun
★★★★★

"I am incredibly grateful to the team at Placent Shiksha. They don't just teach; they mentor you through every step of the interview process. Their mock interviews and resume-building sessions gave me the confidence to land my dream job."

Sanya
★★★★★

"The courses are well-structured and highly engaging, focusing on real-world scenarios. Placent Shiksha played a pivotal role in my professional development, and I highly recommend them to any lifelong learner looking to level up."

Deshmukh
★★★★★

"Choosing Placement Shiksha was the best decision for my career. The placement cell is proactive and truly cares about your success even after the course ends. I felt respected and supported throughout my entire journey here."

What our students Say?

About Placement Shiksha

Placement Shiksha is a premier career-tech platform dedicated to bridging the gap between academic learning and professional employment. Why Choose Us?

- **Industry-Aligned Training:** Master the technical and soft skills actually demanded by today's recruiters.
- **Personalized Mentorship:** Learn directly from experts at top MNCs and high-growth startups.
- **End-to-End Support:** From ATS-friendly resume building to mock interviews, we guide you through every step of the hiring funnel.
- **Direct Placements:** Gain exclusive access to our extensive network of hiring partners.

Our Mission

Our mission is to democratize career success by transforming every candidate into a job-ready professional. We bridge the gap between academic learning and corporate expectations through accessible, high-quality training and expert mentorship.