

## Core Java + Competitive Programming Syllabus

### Fundamentals to Advanced Concepts

#### Module 1: Java Basics

- Variables, Data Types, Operators
- Control Structures
- Methods and Classes

#### Module 2: OOP Concepts

- Inheritance and Polymorphism
- Encapsulation and Abstraction
- Interfaces and Abstract Classes

#### Module 3: Collections Framework

- Lists, Sets, Maps
- Iterators and Generics
- Streams API

#### Module 4: Competitive Programming

- Data Structures for CP
- Algorithm Design
- Problem Solving Strategies