

DSA + Full Stack Development + CS Fundamentals

Course Details

Module 01 •

Introduction to Data Structures and Algorithms (DSA)

- Overview of Data Structures: Arrays, Linked Lists, Stacks, Queues, Trees, Graphs, etc.
- Introduction to Algorithms: Searching, Sorting, Dynamic Programming, Greedy Algorithms, etc.
- Data Structure Implementation and Operations in Java and C++
- Algorithm Design and Analysis Techniques
- Time and Space Complexity Analysis

Module 02 •

Full Stack Development

Frontend Development

- Introduction to Frontend Development
- HTML, CSS, JavaScript Fundamentals
- Frontend Frameworks: React.js for JavaScript, React Native for cross-platform mobile development
- UI/UX Design Principles
- Frontend Development Tools and Libraries

Backend Development

- Introduction to Backend Development
- Node.js and Express.js for server-side development
- Database Management Systems: MongoDB for NoSQL databases
- RESTful API Development
- Authentication and Authorization

Want to get placed as a software engineer ?

80%

Student Placed

44LPA

Highest Package

10LPA

Average Package

Module 03 •

Computer Science Fundamentals

- Introduction to Computer Science
- Fundamentals of Operating Systems and Networking
- Principles of Database Management Systems
- Software Engineering Principles and Best Practices
- Object-Oriented Programming Concepts
- Design Patterns

Module 04 •

Live Projects

- Collaborative Project Work in Teams
- Real-world Scenarios and Problem Solving
- Implementation of DSA and Full Stack Development Concepts
- Agile Methodologies and Project Management
- Deployment and Maintenance

Assessment and Certification •

- Regular Quizzes and Assignments to Assess Understanding
- Final Project Presentation and Evaluation
- Course Completion Certificate

Duration & Prerequisites •

- The course is designed to be completed in 4 months.
- Basic knowledge of programming concepts and familiarity with Java and/or C++ programming languages is recommended.

Who Should Enroll •

- Students aiming for careers in product-based companies
- Individuals seeking to gain expertise in Data Structures, Algorithms, Full Stack Development, and Computer Science fundamentals
- Anyone interested in mastering both frontend and backend development technologies