



   **ANG**



▶ **Programming Fundamentals**

- ▶ Language basics (Python)
- ▶ OOP
- ▶ Bit Manipulation
- ▶ Math for Problem Solving
- ▶ exception handling
- ▶ setters/Getters

▶ **Data Structures & Algorithms (DSA)**

- ▶ Arrays
- ▶ Strings
- ▶ Linked Lists
- ▶ Trees
- ▶ Heaps
- ▶ Graphs
- ▶ data pointers
- ▶ Sorting
- ▶ Searching (Binary Search)
- ▶ Time/Space Complexity.

▶ **Computer Science Fundamentals**

- ▶ Operating Systems (OS)
- ▶ 7 layers
- ▶ Databases (SQL: Joins, CRUD, Indexing)
- ▶ Networking (APIs, Microservices).

▶ **System Design (High & Low Level)**

- ▶ Design Principles
- ▶ Schema Design
- ▶ Load balancer
- ▶ Auto scaling
- ▶ HA
- ▶ scalability
- ▶ Caching
- ▶ CDN
- ▶ Distributed Systems
- ▶ Sharding
- ▶ Monoliths
- ▶ Microservices.

▶ **Practical Application**

- ▶ Real-world projects
- ▶ hackathons
- ▶ building impact
- ▶ using Git

▶ **Interview Prep**

- ▶ Resume Building
- ▶ Behavioral Rounds
- ▶ Mock Interviews
- ▶ Application Strategy.



Our Students Are Placed In
