Complete Placement Course syllabus

We have designed this course specifically for placement preparation of TECH companies like TCS, Accenture, Infosys, Cognizant, Wipro, Capgemini and many more.
Course covered every domain required for cracking the interviewes of these TECH companies. Couse is divided into 4 domain :

1. PROGRAMMING LANGUAGE
2. DATA STRUCTURE AND ALGORITHMS
3. APPTITUDE
4. INTERVIEW PREPARATION

Each section will have the assessment and after completing the course we will provide a certificate of completion for each domain.

Programming Language :

The course assumes no previous experience with C++ (or even programming in general), and you will end up with the skills to create your own programs in C++.

Section 1: Programming Basics and Overview

- Computer Programming Background
- C++ Overview
- Basic C++ Syntax

- Compiling and executing C++ Programs
- Using IDE
- Basic Input and Output
- Variables

Section 2 : Flow Control

- If Statements
- Switch
- Loops
- While..Do...For
- Data Types
- Statements

Section 3 : C++ Basic Concepts

- Memory Management
- Arrays
- Strings
- Handling Exceptions
- Basic Debugging Skills

Section 4 : OOP Basics

- What is an Object?
- Classes
- Functions (access control)
- OOP Abstract
- Constructor & Destructor
- Interface
- Polymorphism

- Encapsulation
- Inheritance
- Reading and writing to files

Section 5 : C++ Functions

- C++ Functions
- C++ Function Types
- C++ Function Overloading
- C++ Default Argument
- C++ Storage Class
- C++ Recursion
- C++ Return Reference

Section 6 : C++ Arrays & String

- C++ Arrays
- Multidimensional Arrays
- C++ Function and Array
- C++ String

Section 7: C++ Structures

- C++ Structure
- Structure and Function
- C++ Pointers to Structure
- C++ Enumeration

Section 8 : C++ Object & Class

- C++ Objects and Class
- C++ Constructors

- C++ Objects & Function
- C++ Operator Overloading

Section 9 : C++ Pointers

- C++ Pointer
- C++ Pointers and Arrays
- C++ Pointers and Functions
- C++ Memory Management

Section 10 : C++ Inheritance

- C++ Inheritance
- Inheritance Access Control
- C++ Function Overriding
- Multiple & Multilevel Inheritance
- C++ Friend Function
- C++ Virtual Function
- C++ Templates

Data Structure and Algorithms :

What we will teach :

1. Various Popular Data Structures and their Algorithms.
2. Implementation of Data Structures using C and C++
3. Recursive Algorithms on Data Structures
4. Various Sorting Algorithms
5. How to develop Analytical skills in Data Structure and use them efficiently.

Section 1: Introduction

- setting up the environment
- Introduction of various data structures and abstract data types

Section 2 - Arrays:

- what is an array data structure
- arrays related interview questions

Section 3 - Linked Lists:

- linked list data structure and its implementation
- doubly linked lists
- linked lists related interview questions

Section 4 - Stacks and Queues:

- stacks and queues
- stack memory and heap memory
- How does stack memory work exactly?
- stacks and queues related interview questions

Section 5 - Binary Search Trees:

- what are binary search trees
- practical applications of binary search trees
- problems with binary trees

Section 6 - Priority Queues and Heaps:

- what are priority queues
- what are heaps
- heapsort algorithm overview

Section 7 - Hashing and Dictionaries:

- associative arrays and dictionaries
- how to achieve **O(1)** constant running time with hashing

Section 8 - Graph Traversal:

- basic graph algorithms
- breadth-first
- depth-first search
- stack memory visualization for DFS

Section 9 - Sorting Algorithms

- bubble sort, selection sort and insertion sort
- quicksort and merge sort
- non-comparison based sorting algorithms
- counting sort and radix sort

Section 10 - Shortest Path problems (Dijkstra and Bellman-Ford Algorithms):

- shortest path algorithms
- Dijkstra's algorithm
- Bellman-Ford algorithm

APPTITUDE :

What we will teach :

- Reasoning Tricks
- Analytical Thought Process
- Speed Booster to Problem Solving Abilities
- Regular updates on recent patterns

Section 1 : Quantitative Apptitude

- Number system & Divisibility
- HCF & LCM
- Series & Progression
- Time, Speed & Distance
- Time & Work
- Percentages
- Permutation & Combination
- Profit & Loss
- Probablity
- Geometry
- Mixtures & Allegations
- Logarithms

Section 2 : Verbal Ability

- Sentence Completion
- Reading Comprehension
- Para jumbles
- Synonyms
- Antonyms
- Error Identification
- Sentence Improvement and Construction

Section 3 : Logical Reasoning

- Data Interpretation
- Cryptarithmetic
- Data Sufficiency
- Deductive Logic
- Selection decision tables
- Coding pattern and Number series pattern recognition
- Analogy and Classification pattern recognition
- Logical word sequence

INTERVIEW PREPARATION :

Section 1 : Core CS fundamental Subjects

- Operating Systems
- Database Management
- Object Oriented Programming
- Computer networks

Section 2 : Resume making

- Do’ s and dont of Resume
- How to make a kickass LinkedIN Profile for Placements.
- How to Make a Dope GitHUB profile for interviews

Section 3 : Group Discussion Preparation

- Group Discussions Questions and Answers
- How to effectively start a group discussion.
- How to Prepare for Group Discussion for Placements.

Section 4 : HR interview

- How HR Interviews are conducted
- Most asked HR Interview Questions for Freshers