# Course Agenda

## Problem Solving Process

## Concept of Functions

## Static Array vs Dynamic Array

## Static Matrix vs Dynamic List of List

## Iterative Complexity Analysis

## Mathematical Problems, Range Sum

## Getting Familiar with Built-In Libraries (Sort, Pair, Set, Map, Stack, Queue, Priority Queue)

## Bit Manipulations

## Recursion (Tracing and Complexity Analysis)

## Backtracking

## Sorting and Its Applications

## Searching Problems (Binary Search, Set, Map)

## Applications of Stack and Queue

## Subarray Problems (Sliding Window, Two Pointers)

## Linked Lists

## Tree

## Heap/Priority Queue

## Trie

## Dynamic Programming

## Graphs