The course is divided into multiple modules, as described below. Each module has multiple sections.

Module-1 Data Structures Recap

Section 3. Space Time Complexity Analysis

Section 4. Data Structures & STL Containers

Section 5. Bitmanipulation Basics

Section 6. Bitmanipulation Problems

Module-2 Mathematics

Section 7. Big Integers

Section 8. Linear Recurrences & Matrix Exponentiation

Section 9. Pigeonhole Principle

Section 10. Mathematical Expectation

Section 11. Inclusion-Exclusion

Module-3 Number Theory

Section 12. Prime Numbers & Factorisation

Section 13. Extended Euclidean Algorithm

Section 14. Theorems in Number Theory

Section 15. Combinatorics

Module-4 Algorithms

Section 16. Recursion

Section 17. Backtracking

Section 18. Binary Search

Section 19. Divide & Conquer

Section 20. Greedy Algorithms

Section 21. Meet in Middle

Module-5 Range Queries

Section 22. Segment Trees

Section 23. Lazy Propagation

Section 24. Fenwick Trees

Section 25. Square Root Decomposition

Module-6 Game Theory

Section 27. Combinatorial Games

Section 28. NIM Game

Module-7 Graph Theory

Section 28. Graph Traversals

Section 29. Graphs as Trees

Section 30. Lowest Common Ancestor

Section 31. Directed Graphs & SCC

Section 32. Disjoint Set Union

Section 33. Spanning Trees

Section 34. Shortest Paths

Module-8 Dynamic Programming

Section 35. Classical DP

Section 36. Advanced DP

Module-9 Pattern Matching

Section 37. Pattern & String Matching

Module-10 Advanced Topics

Section 38. Geometric Algorithms

Section 39. Interactive Problems

Section 40. Random Randomisation

Section 41. Policy Based Data Structures