- Understand what an algorithm is

- Examples of everyday algorithms

- Types and classifications of algorithms

- Time complexity and its importance

- Analysis of algorithms

- Worst-case, average-case, and best-case analysis

- Comparing algorithms (time and space complexity)

- Rate of growth and common growth rates

- Types of analysis (asymptotic and empirical)

- Asymptotic notations (Big-O, Omega, Theta)

- Classifications of data structures

- Basic operations on data structures

- Space complexity basics

- Time complexity of basic data structures