

Computer Science Core Notes

Student Help Hub – Complete Reference PDF

Data Structures

- Arrays, Linked Lists, Stacks, Queues
- Trees, Binary Search Trees
- Graphs, BFS, DFS
- Sorting and Searching Algorithms
- Time and Space Complexity

Operating Systems

- Process Management
- CPU Scheduling Algorithms
- Deadlocks
- Memory Management
- Virtual Memory
- File Systems

Database Management Systems

- ER Model
- SQL Basics and Advanced Queries
- Normalization
- Transactions and Concurrency
- Indexing

Computer Networks

- OSI Model
- TCP/IP Model
- Routing Algorithms
- Congestion Control
- Network Security Basics