Course Syllabus: CSE203

Data Structures

Course Information

Course Code:	CSE203
Course Title:	Data Structures
Credits:	4
Year:	Year 2
Semester:	Semester 1
Department:	Computer Science and Engineering
Institution:	University of Dhaka

Course Description

This course covers fundamental data structures and algorithms used in computer science. Students will learn how to analyze, design, and implement efficient data structures and algorithms.

Learning Objectives

• Understand core concepts and principles related to the subject matter

• Develop practical skills in applying theoretical knowledge

• Analyze and solve complex problems in the field

• Communicate ideas and solutions effectively

• Work collaboratively in team-based projects

Course Topics

1. Arrays and Linked Lists
2. Stacks and Queues
3. Trees and Graphs
4. Hashing
5. Algorithm Analysis

Assessment

Component	Weight
Midterm Examination	30%
Final Examination	40%
Assignments	15%
Lab Work	10%
Attendance	5%

Recommended Textbooks

• Data Structures and Algorithm Analysis in C++ by Mark Allen Weiss
• Introduction to Algorithms by Cormen, Leiserson, Rivest, and Stein