



**Tulsiramji Gaikwad-Patil College of Engineering and Technology**

Wardha Road, Nagpur - 441108

Accredited with NAAC A+ Grade

Approved by AICTE, New Delhi, Govt. of Maharashtra

(An Autonomous Institution Affiliated to RTM Nagpur University, Nagpur)



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## Department of Computer Science & Engineering

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### **B. Tech VI Sem in Computer Science & Engineering**

**Course Name: BCS32302: (Data Structure)**

<b>BCS32302</b>	<b>Course Outcomes</b>
CO1	Understanding Fundamental Data Structures: Students should grasp the fundamental concepts of various data structures such as arrays, linked lists, stacks, queues, trees, and graphs
CO2	Analyzing Algorithm Efficiency: Students should learn how to analyze the efficiency of algorithms concerning time complexity and space complexity.
CO3	Implementing Data Structures: Students should be able to implement various data structures using programming languages such as C, C++, Java, or Python
CO4	Understanding Advanced Data Structures: Beyond the basics, students may delve into more advanced data structures such as hash tables, heaps, AVL trees, B-trees, and advanced graph algorithms.
CO5	Working with Abstract Data Types (ADTs): Students should understand the concept of ADTs and how they relate to data structures. This involves understanding how to encapsulate data and operations within abstract data types, providing clear interfaces for interacting with the data.