

Galgotias College of Engineering & Technology
Details of Lab Equipment : 2023-24
Department of Computer Science Engineering Labs

Lab No.-E-007A

Name: Data Structure Lab

Lab/ Major Equipments : 32 Computers (CPU- (Processor) 12th Gen Intel (R) Core (TM) i5 -12500 3.00Ghz

Ram- 8 gb

Rom- SSD 512gb

Mouse - hp

Keyboard - hp

Monitor- 23.8in hp)

Description of Labs: The Data Structure Laboratory offers practical exploration of fundamental data structures and algorithms. Through hands-on exercises and coding projects, students delve into concepts such as arrays, linked lists, stacks, queues, trees, and graphs. The lab provides a platform for implementing, analyzing, and optimizing algorithms for searching, sorting, and traversal. Students gain proficiency in understanding the efficiency and trade-offs associated with different data structures and algorithms. Emphasis is placed on problem-solving techniques and algorithmic thinking, fostering critical reasoning skills. Additionally, the lab enables students to apply data structures and algorithms in solving real-world problems across various domains, from software development to data analysis. By the end of the course, students acquire a solid foundation in data structures and algorithms, preparing them for advanced studies and careers in computer science and related fields.

