

1.	Title of the course	Data Structures and Algorithms Laboratory
2.	Course number	CS204P
3.	Structure of credits	0-0-3-2
4.	Offered to	UG
5.	New course/modification to	Modification To CS2294/8
6.	To be offered by	Department of Computer Science and Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	Course Objective(s): To inculcate programming skills through implementation of various data structures and algorithms, and analyze them for various computational problems.	
10.	Course Content: Programming assignments on the following data structures and algorithms, and the associated application problems: searching, sorting, stacks, queues, linked lists, iterators, binary trees, binary search trees, balanced binary search trees, priority queues, hashing, external sorting, undirected graphs, directed graphs, directed acyclic graphs, strongly connected components.	
11.	Textbook(s): 1. Weiss M A, <i>Data Structures and Algorithm Analysis in C++</i> , 4th Edition, Pearson (2014).	
12.	Reference(s): 1. Aho A V, Hopcroft J E and Ullman J D, <i>Data Structures and Algorithm</i> , Pearson (2001). 2. Sahni S, <i>Data Structures, Algorithms and Applications in C++</i> , 2nd Edition, University Press (2005).	