

**Maulana Abul Kalam Azad University of Technology, West Bengal**  
*(Formerly West Bengal University of Technology)*  
**Syllabus for B. Tech in Computer Science & Engineering**  
(Applicable from the academic session 2018-2019)

<b>Subject Code :</b> PCC-CS 391	<b>Category:</b> Professional Core course
<b>Subject Name :</b> Data Structure & Algorithm Lab	<b>Semester :</b> Third
<b>L-T-P : 0-0-4</b>	<b>Credit:2</b>
<b>Pre-Requisites:</b> No-prerequisite	

Experiments should include but not limited to :

Implementation of array operations:

Stacks and Queues: adding, deleting elements Circular Queue: Adding & deleting elements Merging Problem :

Evaluation of expressions operations on Multiple stacks & queues :

Implementation of linked lists: inserting, deleting, inverting a linked list.

Implementation of stacks & queues

using linked lists:

Polynomial addition, Polynomial multiplication

Sparse Matrices : Multiplication, addition.

Recursive and Nonrecursive traversal of Trees

Threaded binary tree traversal. AVL tree implementation

Application of Trees. Application of sorting and searching algorithms

Hash tables implementation: searching, inserting and deleting, searching & sorting techniques.

(Detailed instructions for Laboratory Manual to follow for further guidance. The details will be uploaded in the website from time to time)