

**Maulana Abul Kalam Azad University of Technology, West Bengal***(Formerly West Bengal University of Technology)***Syllabus for B. Tech in Electronics & Communication Engineering**

(Applicable from the academic session 2018-2019)

<b>Course Code :</b> ES-CS 391	<b>Category :</b> Engineering Science Courses
<b>Course Title :</b> Data Structure Lab	<b>Semester :</b> Third
<b>L-T-P : 0-0-2</b>	<b>Credit:</b> 1
<b>Pre-Requisites:</b>	

**Experiments should include but not limited to :**

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Implementation of array operations:

Stacks and Queues: adding, deleting elements Circular Queue: Adding &amp; deleting

elements Merging Problem : Evaluation of expressions operations on Multiple stacks  
& queues :

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

Implementation of stacks &amp; 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 &amp; sorting techniques.