THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI-15
(A Govt. Aided Autonomous Institution affiliated to Anna University)
- *where Quality and Ethics matter*

QEEE COURSES

NON-LINEAR DATA STRUCTURES AND APPLICATIONS - DATA STRUCTURES AND ALGORITHMS

COURSE CONTENT:

- Hash table data structure with basic operations; hashing function and collision resolution; implementation using array and linked list; comparison of hash table with other searching algorithms.

- Doubly and multiply linked data structures with basic operations; use in implementating binary tree and graph data structures. Comparison of linked data structures with space and time cost for basic operations.

- Implementation of multiply linked lists in C++; template class implementation of a linked list.

- Applications of nonlinear data structures in problem solving – (a) search application using hash tables, (b) sparse polynomial manipulation : addition; subtraction; multiplication, (c) design of buffer cache for disk blocks.