

## INTRODUCTION

**Design and Analysis of Algorithms** aka **DAA** is a very important subject introduced into the engineering curriculum of **Computer Science and Engineering & Information Technology**.

Since Problem Solving is the core aspect of CSE & IT UG Programs, Clear Understanding of Algorithms is essential. The Objective of this FDP is to provide in depth ability to any faculty member regarding the basics of Algorithms, analysis methods, classification of Algorithms and Solvability issues. A good collection of problems where Divide and Conquer, Greedy heuristic methods, Dynamic Programming formulations or Search methods like backtracking or branch and bound techniques can be applied will be considered for discussion. In view of Outcome Based Education System implementation at LRBCE this program is considered for Quality Improvement.

### Course Contents:

1. Introduction
2. Elementary Data Structures
3. Divide and Conquer
4. Greedy Method
5. Dynamic Programming
6. Basic Search and Traversal Techniques
7. Backtracking
8. Branch- and – Bound
9. Lower bound theory
10. NP-Hard and NP-Complete Problems.

## ABOUT THE COLLEGE

The LBR College of Engineering (LBRCE) is located at Mylavaram, 40km from Vijayawada on Bhadrachalam highway and is spread over 50 acres of sprawling lush green landscape spotted with orchids and grooves. One of the good achievements of the LBRCE is Autonomous status from the academic 2010-11. The place is a hub of leading power plants like VTPS, LANCO Kondapally and Industries like APHMEL, HPCL and Bharat Petroleum.

At LBRCE the focus is on a well balanced approach where most sophisticated infrastructure is supported by a dedicated team of well qualified and experienced faculty. The Management also actively involves in every aspect and career of the faculty and students. LBRCE offers B.Tech Courses in CSE, IT, ECE, EEE, EIE, MECH Engineering and P.G. programmes: M.B.A., M.C.A, & M.Tech Courses in ECE, CSE,IT and Mech. All laboratories are equipped with state of the art facilities backed by advanced computer systems and the latest software. The library has over **30,442 books** spanning **8589 titles**. It subscribes over **100 International Journals, 74 National journals** and **39 Technical and general magazines**. A digital library is a part of this facility with over **4000 VCD collections** produced from IIT'S, EKALAVYA and SONET with **4.5TB of storage capacity server**. The students have access to internet and also to DELNET to supplement their classrooms teaching.

IN HOUSE

FACULTY DEVELOPMENT PROGRAMME

On

“DESIGN AND ANALYSIS OF ALGORITHMS”



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**Er.L.Bali Reddy**

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