



## DEPARTMENT OF MECHANICAL ENGINEERING

### REPORT ON “A THREE DAYS WORKSHOP ON HANDS ON ANSYS”

Event Type	: Student Certification Program
Date/Duration	: 27-01-2025 to 29-01-2025
Name of the Event	: A Three days’ workshop on Hands on Ansys
Resource Person	: Md Asjad Raza, PMRF Scholar, NIT TRICHY
Name of the Coordinator	: Dr. S. Rami Reddy, Sr. Assistant Professor.
Target Audience	: B. Tech Final Year
Total Number of students	: 58
Objective of the Event	: The workshop provides a brief introduction to ANSYS Simulation and the Workbench environment, covering the user interface related to geometry, importing, meshing, applying loads and supports, real-world examples, and post-processing.
Outcome of the Event	: By the end of the workshop, participants will be able to understand ANSYS Simulation and the Workbench environment, navigate the user interface related to geometry, import and mesh models, apply loads and supports, analyze real-world examples, and perform post-processing.
Description/Report on Event	: The Mechanical Engineering Department conduct three days’ workshop on Hands on Ansys for Final Year Students from 27/01/2025 to 29/01/2025 in association with NIT TRICHY. During the training sessions, the students got the knowledge on the following topics.

- Introduction to Finite Element Analysis (FEA), Why FEA, Application of FEA, Introduction to ANSYS Workbench, Geometric modelling.
- Hands-on Static Structural Analysis with various loading and boundary conditions, convergence study
- Buckling Analysis, Modal and Harmonic Analysis, Metaphysics using ANSYS

# BROCHURE

## About the Institute

The Lakireddy Bali Reddy College of Engineering (LBRCE) was established in the year 1998 by Lakireddy Bali Reddy Charitable Trust, whose architect is Er. Lakireddy Bali Reddy garu. The institute is established with the sole aim of providing high quality educational opportunities in the field of science, engineering, technology and management. It is spread over 60 acres of sprawling lush green landscape spotted with orchids and grooves. It is approved by AICTE, affiliated to JNTUK, Kakinada and attained autonomous status in the year 2010. Institute has NAAC accreditation and almost five programs were accredited under NBA-Tier1. The College has also been awarded 2(f) and 12(B) status, apart from the recognition as a 'College with Potential for Excellence (CPE)' from the UGC.

LBRCE has sophisticated infrastructure with dedicated, well qualified and experienced faculty. A separate R&D cell is established in the college to focus on continuous research, has various sponsored research projects by various funding agencies. All laboratories are equipped with state-of-the-art facilities backed by advanced computer systems with latest software. Recently Institute has started the Advanced Robotic Control (ARC) centre in association with German Collaboration.

## About the Department

Mechanical Engineering is one of the major disciplines in the engineering profession and its principles are involved in the thermal, design and fabrication of nearly all of the physical devices and systems. Continued research and development have led to better machines and processes helping the mankind.

The Department of Mechanical Engineering has come into existence in LBRCE (Autonomous) in the year 1998. It offers undergraduate program in Mechanical Engineering with an intake of 180 and a Post-graduate program in the area of Thermal Engineering specialization. The Department has well qualified, dedicated faculty with good laboratory facilities including equipment required for

research work. The faculty is actively engaged in research activities in their areas of specialization. In R&D, we got DST and AICTE, MODRABS projects worth of Rs.1 Crore 27 Lakhs. The Department has DASSAULT Systems laboratory in collaboration with AP Skill Development Centre and has ANSYS 18.1 Licensed Software worth of Rs.28Lakhs for 300 users to carry out research works

## About the Workshop

A Workshop on Hands on Ansys is a structured training program designed to provide participants with in-depth knowledge and hands-on experience in using ANSYS software for engineering simulations. ANSYS is a powerful tool widely used for Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), and Electromagnetic Analysis, making this workshop essential for engineers, researchers, and students in various fields.

## Workshop Objective

The objective of Workshop is to provide participants with hands-on experience and in-depth knowledge of ANSYS software for engineering simulations.

## Highlights of the Training

- ❖ The lectures briefly introduce ANSYS Simulation and the workbench environment.
- ❖ General understanding of user interface as related to geometry.
- ❖ Import, meshing, and application of loads and supports
- ❖ Real-world examples
- ❖ Post processing

LAKIREDDY BALI REDDY COLLEGE OF  
ENGINEERING (AUTONOMOUS)  
MYLAVARAM – 521 230  
DEPARTMENT OF MECHANICAL ENGINEERING  
IN ASSOCIATION WITH  
NIT TRICHY



THREE DAYS WORKSHOP ON  
HANDS ON ANSYS™  
(27<sup>th</sup> to 29<sup>th</sup> January 2025)

## Registration Form

1. Name: \_\_\_\_\_
  2. Regd.No: \_\_\_\_\_
  3. Year of Study: \_\_\_\_\_
  4. Branch: \_\_\_\_\_
  5. Institution: \_\_\_\_\_
  6. Address for Correspondence \_\_\_\_\_
  7. E-Mail: \_\_\_\_\_
- Phone no: \_\_\_\_\_

## Declaration

The above information provided is true to the best of my knowledge. I agree to abide by the rules and regulations of the workshop course.

Place: \_\_\_\_\_  
Date: \_\_\_\_\_ Signature of Applicant

## Sponsorship Certificate

Mr./Ms. \_\_\_\_\_  
is a student of our Institute and is hereby sponsored to participate in Three Days workshop on "Hands on Ansys"

Place: \_\_\_\_\_  
Date: \_\_\_\_\_ Signature of Head of Institution  
(With seal)

## COMMITTEE MEMBERS

### Chief Patron:

Sri. Lakireddy Jaya Prakash Reddy  
Honorary Chairman  
Sri. Lakireddy Prasad Reddy  
Chairman  
Sri.L.Vijaya Kumar Reddy  
Vice -Chairman

### Patron:

Sri. G. Srinivasa Reddy  
President  
Dr. K.Appa Rao  
Principal  
Dr.B. Ramesh Reddy  
Vice principal

### Advisor:

Dr.M.Srinivasa Rao  
Dean Academics  
Dr. S. Pichi Reddy  
Professor & Dean , R&D

### Convener:

Dr.M.B.S. Sreekara Reddy  
Professor & HOD

### Coordinator:

Dr. S.Rami Reddy  
Sr. Assistant Professor

## Important Dates

Last date for submission of application: 24-01-2025  
Duration of Program: 27<sup>th</sup> to 29<sup>th</sup> January 2025

## Resource Person:

1. Md Asjad Raza, PMRF Scholar, NIT TRICHY

## Target Audience

The workshop is open to all final year B.Tech Graduate students of AICTE approved engineering colleges.

## Registration Particulars

Application in the prescribed format duly sponsored by the Head of the Institution should reach the coordinators on or before 24-01-2025

## Registration Fee

For Each Student: Rs.100/-

- ❖ Certificate provided for eligible students.

## NOTE

The participants need to pay the registration fee preferably through online in the given bank account. The receipt of payment details may be sent to the email: [ramireddy.mec@gmail.com](mailto:ramireddy.mec@gmail.com)

Account Name	LBRCE
Account Number	3172828720
Branch	Central bank of India, L.B. Reddy Nagar, Mylavaram
IFSC	CBIN0283964

THREE DAYS WORKSHOP ON  
HANDS ON ANSYS™  
(27<sup>th</sup> to 29<sup>th</sup> January 2025)



ORGANIZED BY  
DEPARTMENT OF MECHANICAL ENGINEERING  
IN ASSOCIATION WITH  
NIT, TRICHY



LAKIREDDY BALI REDDY COLLEGE OF  
ENGINEERING (AUTONOMOUS)  
Approved by AICTE, New Delhi and Affiliated to  
JNTUK, Kakinada, Accredited by NAAC, Accredited by  
NBA (Tier-I), ISO 9001:2015 Certified Institution,  
Mylavaram -521230, Krishna (Dt),  
Andhra Pradesh, India,  
Ph: 08659-222933. Fax: 08659-222931  
Website: [www.lbrce.ac.in](http://www.lbrce.ac.in)

## EVENT BANNER



**LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING**  
(Autonomous)  
(Affiliated to JNTUK, Kakinada & Approved by AICTE New Delhi,  
NAAC & NBA Accredited, & Certified by ISO 9001:2015)  
L.B. Reddy Nagar, Mylavaram-521 230, Andhra Pradesh, INDIA.



# " A Three day workshop on Hands on Ansys"

by  
**Md Asjad Raza,**  
PMRF Scholar, NIT TRICHY  
( 27<sup>th</sup> to 29<sup>th</sup> January, 2025)  
Organized by  
**Department of Mechanical Engineering**





## Day to Day Report

**27/01/2025: (09:00 AM to 04:00 PM)**

### **Day 1:**

Introduction to Finite Element Analysis (FEA), Why FEA, Application of FEA, Introduction to ANSYS Workbench, Geometric modelling.



**28/01/2025: (09:00 AM to 04:00 PM)**

### **Day 2:**

Hands-on Static Structural Analysis with various loading and boundary conditions, convergence study

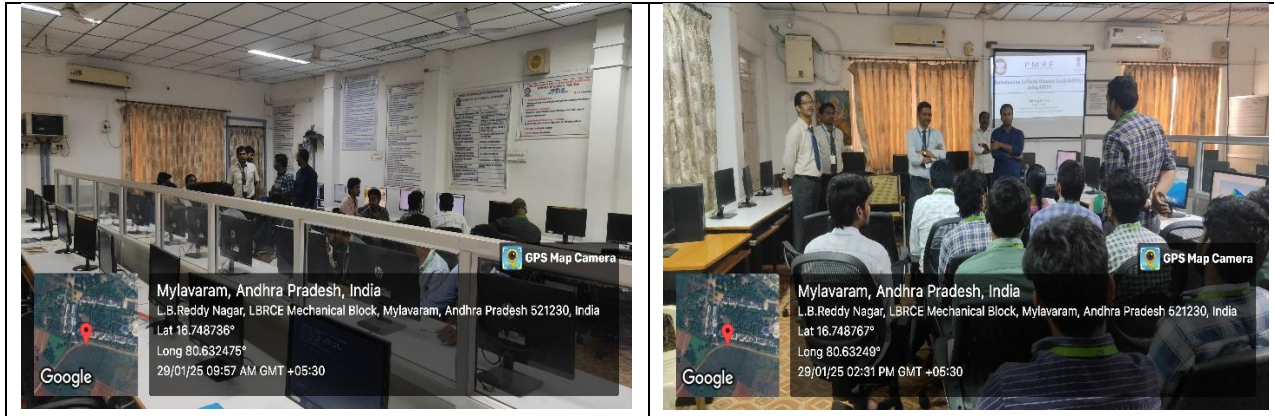




**29/01/2025: (09:00 AM to 04:00 PM)**

**Day 3:**

Buckling Analysis, Modal and Harmonic Analysis, Metaphysics using ANSYS



**Feedback / Suggestions:**

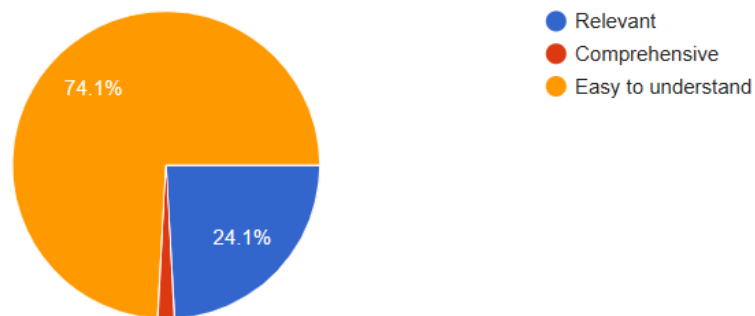
1. I think it's better to extend the workshop for a week Then only we can learn better
2. Workshop is very useful and easy to understand what the teacher is teaching we have gained some knowledge in ansys even though we have ansys in previous semester
3. The trainer helps us to understand the topics very clearly and in an effective manner
4. The way the trainer checking each and every one that everyone gets to know about the software
5. I had learned more about ansys

**Feedback Report:** The student participants gave their feedback on the three days' workshop and the responses were shown in the form of graph given below

## Feedback from the participants

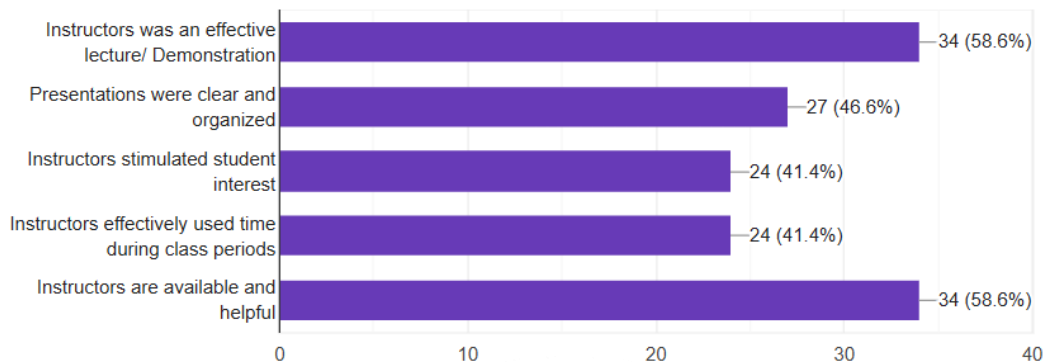
### 1. The workshop content was

58 responses



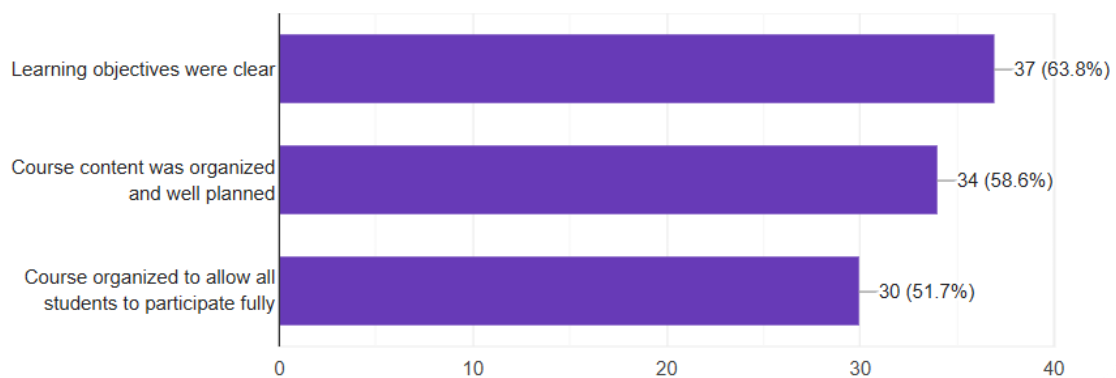
### 2. Skill and response of the instructors

58 responses



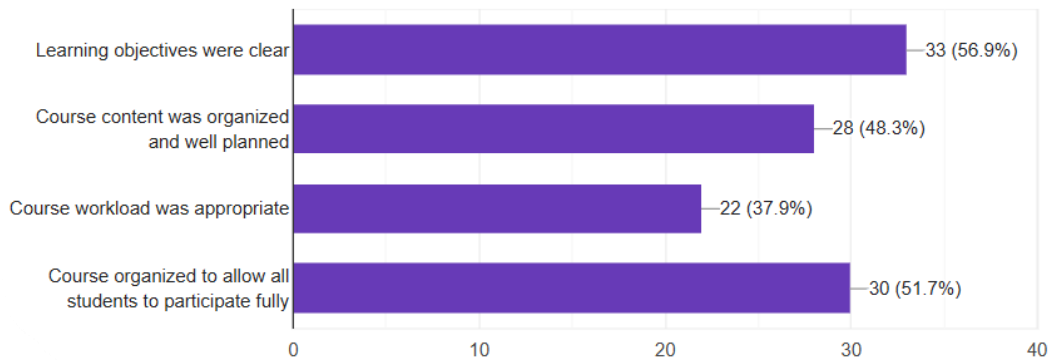
### 3. Course content

58 responses



#### 4. What aspects of this course were most useful or valuable

58 responses

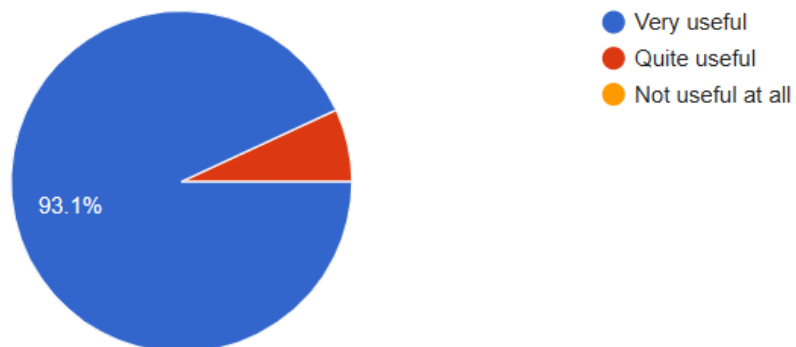


#### 5. What aspects of this course were most useful or valuable?

- This course will be used for my project purpose
- The trainer helps us to understand the topics very clearly and in an effective manner
- Improvement in designing skills
- Course content was organized and well planned
- Learning objectives were clear
- Learning is easy
- Workshop is very useful and easy to understand what the teacher is teaching we have gained some knowledge in ansys even though we have ansys in previous semester
- The way the trainer checking each and every one that everyone gets to know about the software
- Explanation of the trainer is easy to understand

#### 6. Did you find the training program useful?

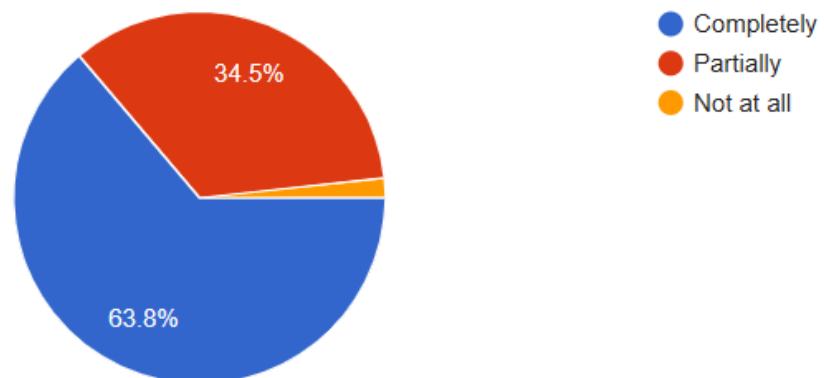
58 responses





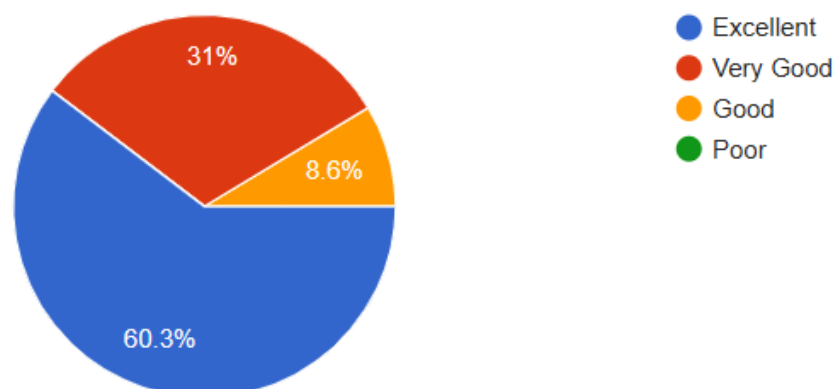
### 7. Did it cover what you were expecting?

58 responses



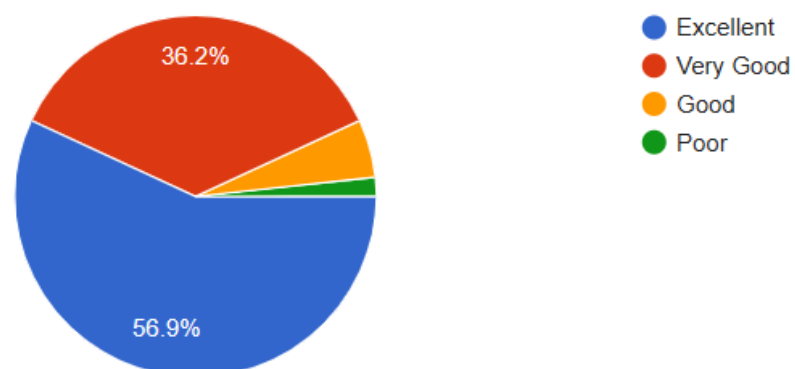
### 8. Doubts cleared by the resource person

58 responses



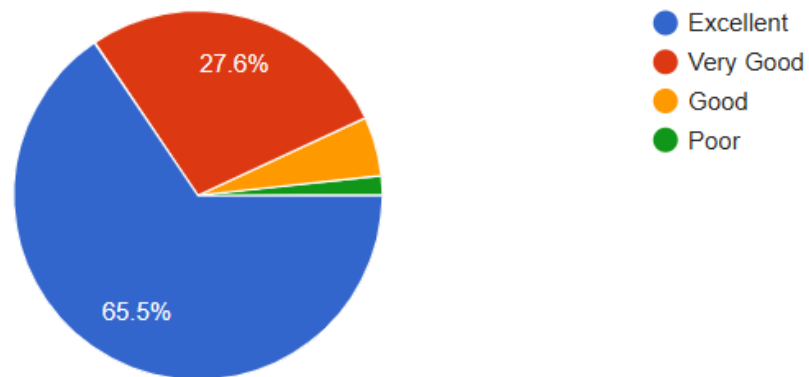
### 9. Contents covered by the resource person on the given topic

58 responses




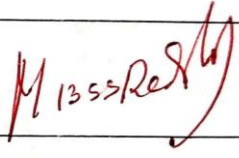
## 10. Resource person depth of knowledge on software

58 responses



## 11. Any other Comments/ Suggestions

- The workshop helps us to get a basic idea about the ansys software
- I think it's better to extend the workshop for a week Then only we can learn better
- A small documentary about the software
- Useful to gain knowledge
- Nice training
- Increasing the hours
- Training was very useful
- I had learned more about ansys

Signature		
	Dr. S. Rami Reddy	Dr.M.B.S.Sreekara Reddy
	Name of the coordinator	Head of the Department