



LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (AUTONOMOUS)

L.B.Reddy Nagar, Mylavaram - 521 230, N.T.R. District, Andhra Pradesh, India
Affiliated to JNTUK, Kakinada & Approved by AICTE New Delhi
Accredited by NBA under Tier - I, Accredited by NAAC
An ISO 21001:2018, 500001:2018, 14001:2015 Certified Institution

DEPARTMENT OF AEROSPACE ENGINEERING

Estd.: 1998 Website: <https://www.lbrce.ac.in/ase/index.php> Email: hodaero@lbrce.ac.in Phone: 08659-222933 Ext: 624/623

Modeling and Analysis Lab Objective:

The **Modelling and Analysis Lab** provides hands-on experience to students in Aerospace Engineering by utilizing industry-standard tools such as **AutoCAD, CATIA, ANSYS, and MATLAB**. This facility enables students to develop skills in **Computer-Aided Design (CAD), Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), and Mathematical Modeling**.

Additionally, the lab supports **networking** capabilities, allowing students to access the **internet and digital library resources** for research and academic purposes. This integrated learning environment enhances their technical proficiency and prepares them for real-world engineering challenges.

Lab Area:

- Dimensions: 27 ft × 56 ft
- Total Area: 1512 sq. ft. (140 sq. m)

Modeling and Analysis Lab Equipment:

Computer Systems

1. **HP Commercial Desktop Systems**
 - **Quantity:** 25
 - **Configuration:** 12th Gen Intel Core i5-12500 (3.00 GHz) / 16GB DDR4 RAM / 512GB SSD
 - **Accessories:** Keyboard, Mouse, 22" LCD Monitor
2. **Dell Desktop Systems**
 - **Quantity:** 12
 - **Configuration:** Intel Core i3-3240 / 8GB DDR4 RAM / 512GB SSD
 - **Accessories:** Keyboard, Mouse, 18" LCD Monitor
3. **HP Desktop Systems**
 - **Quantity:** 35
 - **Configuration:** Intel Core i3-1200 / 8GB DDR4 RAM / 512GB SSD
 - **Accessories:** Keyboard, Mouse, 18" LCD Monitor

Networking & Power Backup

- **UPS:** MARK APC 6KV (01 Unit)
- **Switches:** D-Link 24-Port Gigabit Switch (05 Units)

Additional Equipment

- **Portable Sound System & Collar Microphone**
- **BenQ Projector (01 Unit)**

S. No.	Computer Systems	Quantity
1	HP Pro Tower 280 G9 E PCI Desktop PC , 12th Gen Intel Core i5-12500 (3.00 GHz) / 16GB DDR4 RAM / 512GB SSD / Keyboard / Mouse / 22" LCD Monitor	25
2	Dell, Intel Core i3-3240 / 8GB DDR4 RAM / 512GB SSD / Keyboard / Mouse / 18" LCD Monitor	12
3	HP, Intel Core i3-1200 / 8GB DDR4 RAM / 512GB SSD / Keyboard / Mouse / 18" LCD Monitor	35
	Total	72

Lab In-Charge

- Mr. Nazumuddin Shaik
Senior Assistant Professor, Department of Aerospace Engineering

Supporting Staff

- Mr. V. Brama Reddy
Lab Assistant, Department of Aerospace Engineering

Modeling and Analysis Lab Equipment Cost Summary

S. No.	Name / Configuration	Quantity	Total Cost (INR)
1	HP Pro Tower 280 G9 E PCI Desktop PC, 12th Gen Intel Core i5-12500 (3.00 GHz) / 16GB DDR4 RAM / 512GB SSD / Keyboard / Mouse / 22" LCD Monitor	25	₹13,09,300/-
2	Dell, Intel Core i3-3240 / 8GB DDR4 RAM / 512GB SSD / Keyboard / Mouse / 18" LCD Monitor	12	₹4,03,200/-
3	HP, Intel Core i3-1200 / 8GB DDR4 RAM / 512GB SSD / Keyboard / Mouse / 18" LCD Monitor	35	₹9,87,000/-
4	UPS MARK APC 6KV	01	₹45,600/-
5	D-Link 24-Port Switch	05	₹14,250/-
6	Portable Sound System & Collar Microphone	01	₹22,900/-
7	32GB Pen Drive	02	₹1,440/-
8	Vacuum Cleaner	01	₹3,999/-
9	Air Conditioning Unit	04	₹2,14,800/-
Total Cost			₹30,02,489/-

Lab Photos:



