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Mechanical Engineering E-Magazine (LBRCE)



MECH PULSE

(JAN - MAR 2026)



DEPARTMENT OF MECHANICAL ENGINEERING
LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
(Autonomous)

Accredited by NAAC & NBA (ASE, CE, CSE, IT, ECE, EEE & ME) under Tier - I
Approved by AICTE and Permanently Affiliated to JNTUK, Kakinada

Mechanical Engineering E-Magazine (LBRCE)

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D.Bala Siva Teja (24765A0303)

K.Mohana Krishna Kishore (24765A0305)

MESSAGE FROM HEAD OF THE DEPARTMENT

I am very happy to inform you that the department of mechanical engineering is bringing **MECH PULSE-an e-magazine** its edition IX and volume III. The department of mechanical engineering is Accredited by **National Board of Accreditation (NBA) under Tier-I** and is started in the year 1998 with an intake of 60 students. At present the department is offering B.Tech Mechanical Engineering with an intake of 60 students and M.Tech – Thermal Power Engineering with an intake of 6 students. The department has thirteen state of art laboratories worth of 2.8 crores, with advanced computing facilities, software and research equipment. Advanced **Research Laboratories** in the area of **Cognitive Science, Material Testing, Tribology and Thermal Engineering** are available. The department has 25 faculty members with 14 Doctoral degrees. Eleven faculty are actively pursuing for their Ph.D in various universities and nine research scholars are working for their doctoral under the department faculty. The department faculty constantly upgrade their knowledge in the area of their domain by attending various Faculty Development Programs, workshops, seminars etc. The faculty are actively engaged in their research work and are active in publishing papers in journals and conferences.

VISION OF THE DEPARTMENT

- To impart knowledge in Mechanical Engineering with global perspectives for the graduates to serve the society and industry.

MISSION OF THE DEPARTMENT

- To enable the graduates technically sound with the state- of- the –art curriculum and innovative teaching methods
- To provide training programs that bridge the gap between academia and industry
- To create a conducive environment and facilities to improve overall personality development of the graduates
- To make the graduates aware of role and responsibilities of an engineer in society.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To build a professional career and pursue higher studies with sound knowledge in Mathematics, Science and Mechanical Engineering.

PEO2: To inculcate strong ethical values and leadership qualities for graduates to become successful in multidisciplinary activities.

PEO3: To develop inquisitiveness towards good communication and lifelong learning.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: To apply the principles of thermal sciences to design and develop various thermal systems.

PSO2: To apply the principles of manufacturing technology, scientific management towards improvement of quality and optimization of engineering systems in the design, analysis and manufacturability of products.

PSO3: To apply the basic principles of mechanical engineering design for evaluation of performance of various systems relating to transmission of motion and power, conservation of energy and other process equipment.

SANCTIONED / ONGOING RESEARCH PROJECTS

Name of the Investigator	Title of the Project	Funding Agency	Reference ID	Total Cost (Rs)	Sanctioned Date
Dr.K.Appa Rao Dr.B.Rambabu Dr.Murahari Kolli	IDEA Lab	AICTE	1-7002877028	90,00,000	12.02.2025
Dr.P.Vijaya Kumar (PI) Dr.P.Ravindra Kumar (Co-PI)	Techno Economic aspects of green hydrogen solutions for future energy security	SERB ANRF	SSY/2026/000150	1,50,000	13.03.2026
Mathangi Gowtham (22761A0322) Dr.Sudheer Kumar Battula (Mentor)	AGRO-CHAR Solar Powered Enabled BioChar Syngas production Unit from Agriculture Waste	MSME	MSME IDEATHON 5.0	15,00,000	31.03.2026

RESEARCH PROJECTS APPLIED

Name of the Investigator	Title of the Project	Funding Agency	Total Cost (Rs)	Applied Date
Dr.K.Dilip Kumar	Novel Graphene based Organic Photovoltaics PMS: Y6 for Low cost Solar Energy Harvesting	ANRF-IRG	55,11,480	21.01.2026

PUBLICATIONS BY FACULTY

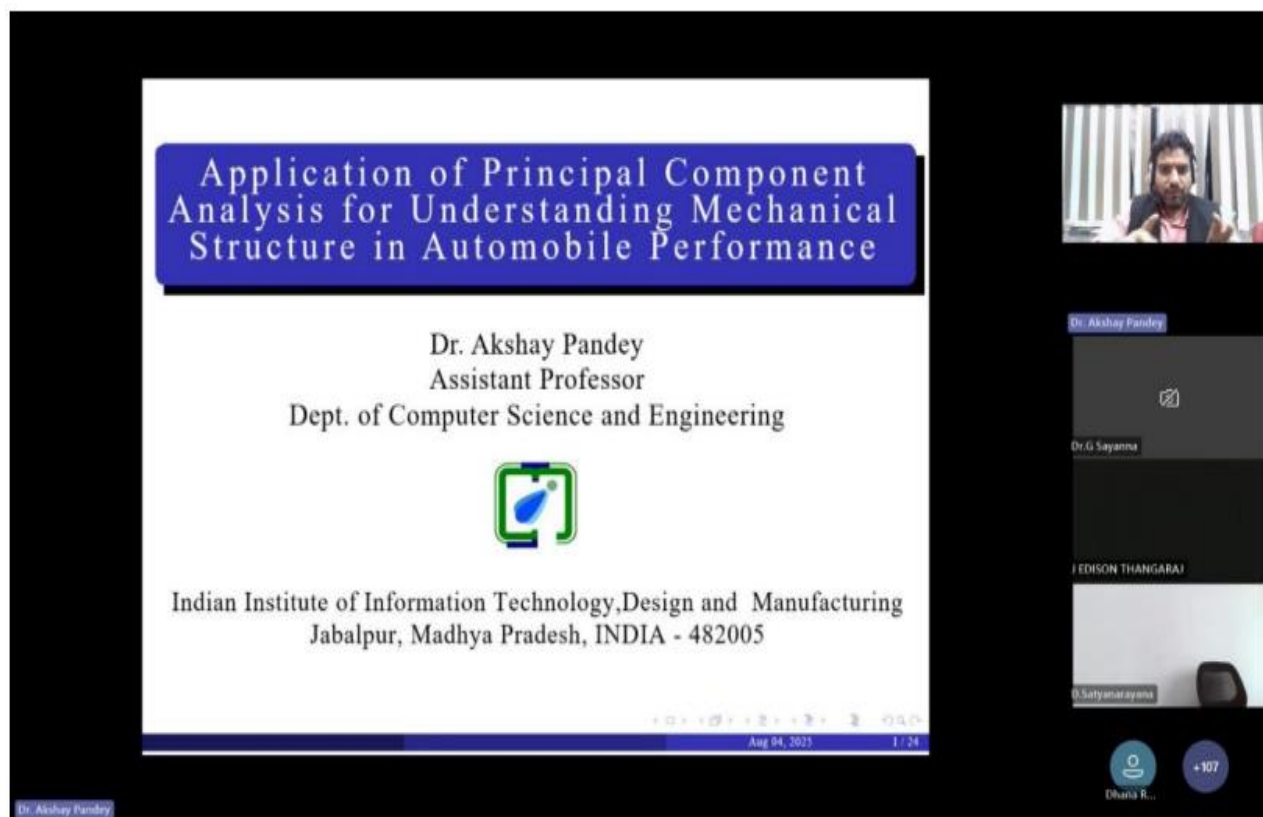
- **Annamdasu Nageswara Rao**, Sajad Ahmad Najar, R. Jeyapaul, B. Chaitanya, K. Lakshmi Padmavathi & Kishore Christopher, Effect of roadside billboards on driving performance: a driving simulator study, *Transportation Planning and Technology*, Jan 2026, ISSN: 0308-1060 / 1029-0354, <https://www.tandfonline.com/doi/full/10.1080/03081060.2026.2617142>, **SCIE, (WOS Indexed)**.
- G Sridevi, Srikar Gemaraju, Karimulla Syed, **Siva Sankara Babu Chinka**, Mangesh Dakhole, Hybrid Epoxy Composites with Areca and Abaca Fibers: Effect of Nano-SiO₂ on Mechanical Properties, *Journal of Polymer & Composites*, 14 (1), Jan 2026, ISSN: 2321-8525 / 2321-2810, <https://journals.stmjournals.com/article/article=2026/view=235717/>, **ESCI, (WOS Indexed)**.
- Putta Nageswara Rao, Lakshmi Vinitha, **Siva Sankara Babu Chinka**, Ramesh Lanka And Vasanth Kumar, An optimized estimation in a 3D printed model spectrometer for predicting patches and the location of the printed object, *Sādhana*, 51(43), Feb 2026, ISSN: 0973-7677, <https://link.springer.com/article/10.1007/s12046-025-03052-x>, **SCIE, (WOS Indexed)**
- T. Sathish, K. Sujit b, **K.Dilip Kumar**, K. Umamaheswari, Zakir Hussain, Mustafa Abdullah, A. Anderson, TiO₂-Al₂O₃-ZnO ternary nanofluids based heat absorption energy and exergy efficiencies enhancement in solar evacuated collector tubes, 321(1B), Feb 2026, ISSN: 0009-2509, <https://www.sciencedirect.com/science/article/abs/pii/S0009250925017531?via%3Dihub>, **SCIE, (WOS Indexed)**
- Vaka Venkata Durga Sahithi, **Dhanunjay Kumar Ammisetti**, Experimental and machine learning studies on flexural properties of 3D-printed PLA/wood composites, *Journal of Reinforced Plastics and Composites*, Mar 2026, ISSN: 0731-6844 / 1530-7964, <https://journals.sagepub.com/doi/abs/10.1177/07316844261435056>, **SCIE, (WOS Indexed)**
- **Murahari Kolli**, Kosaraju Satyanarayana, **Pichi Reddy Seelam**, MD Ahasan, P Mahantesh, Examine Surface Quality Analysis of Wire Arc Additive Manufacturing Components with Mechanical Post-Processing Tool, *Journal of Physics: Conference Series*, 3196 (1), Mar 2026, ISSN: 1742-6588/1742-6596, <https://iopscience.iop.org/article/10.1088/1742-6596/3196/1/012037/pdf>, **SCOPUS, (Indexed)**.
- Md Aashan, Ch Shashikanth, Aruri Devaraju, Ratnala Prasad, U Nagamaneswara Rao, **Murahari Kolli**, Vara Prasad Bhemuni, Mechanical and Microstructural Evaluation of StirCast Aluminium Metal Matrix Composites, *Journal of Physics: Conference Series*, 3196 (1), Mar 2026, ISSN: 1742-6588/1742-6596, <https://iopscience.iop.org/article/10.1088/1742-6596/3196/1/012050/pdf>, **SCOPUS, (Indexed)**.
- CP Pavan Kumar Hota; Polinati Vinod Babu; N V Murali krishna Raja; **Kolagotla Venkateswara Reddy**; Preeti Nutipalli; Kvsr Murthy, Multimodal Deep Learning for

Automated Road Accident Detection: Integrating Vision, Sensing, and AI for Smart Transportation Safety, IEEE Xplore, DOI: [10.1109/APCIT65661.2025.11410716](https://doi.org/10.1109/APCIT65661.2025.11410716), March 2026, 2025 2nd Asia Pacific Conference on Innovation in Technology (APCIT). SCOPUS, (Indexed).

EVENTS ORGANIZED BY THE DEPARTMENT

FACULTY DEVELOPMENT PROGRAM

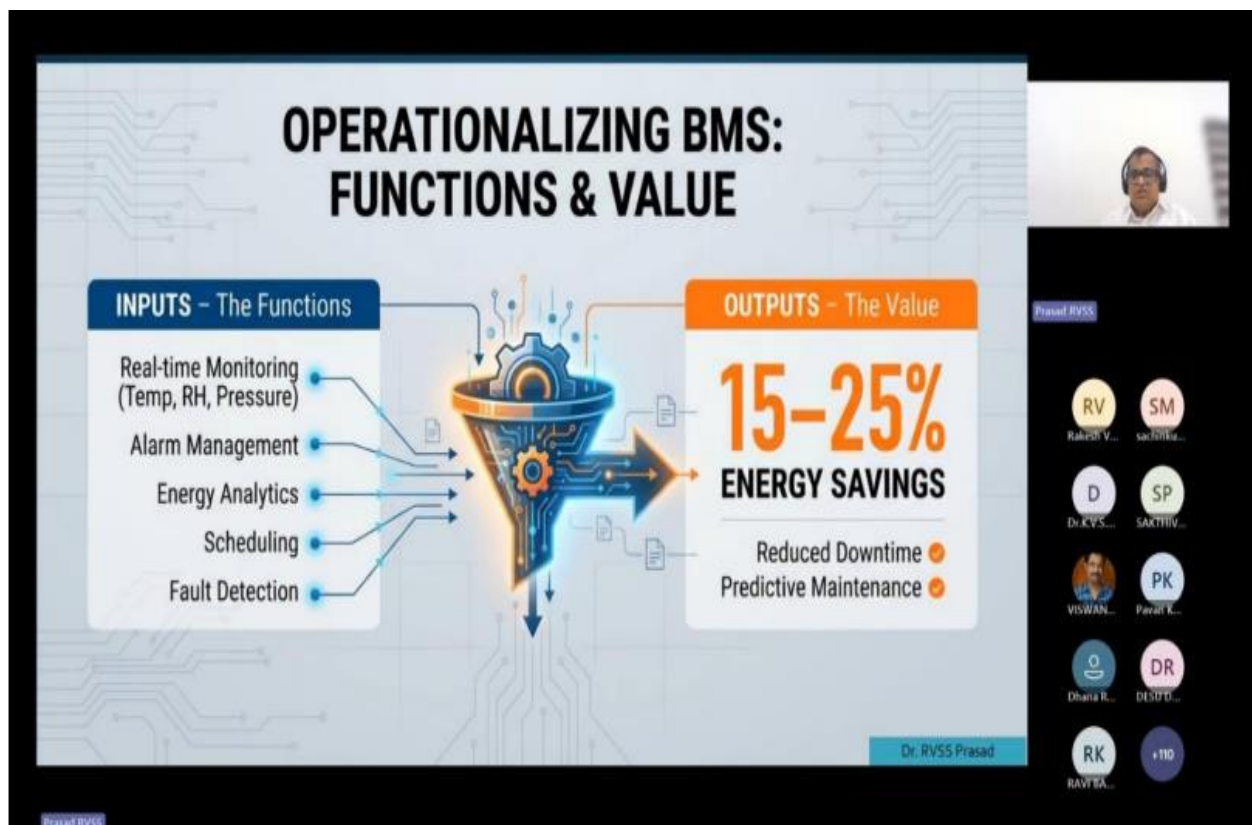
- The Department of Mechanical Engineering successfully organized a one-week online Faculty Development Programme (FDP) on “Advancements in AI-ML-IoT Integration for Smart Mechanical Engineering Systems” from 23rd to 27th February 2026 10 AM to 12:30 PM.



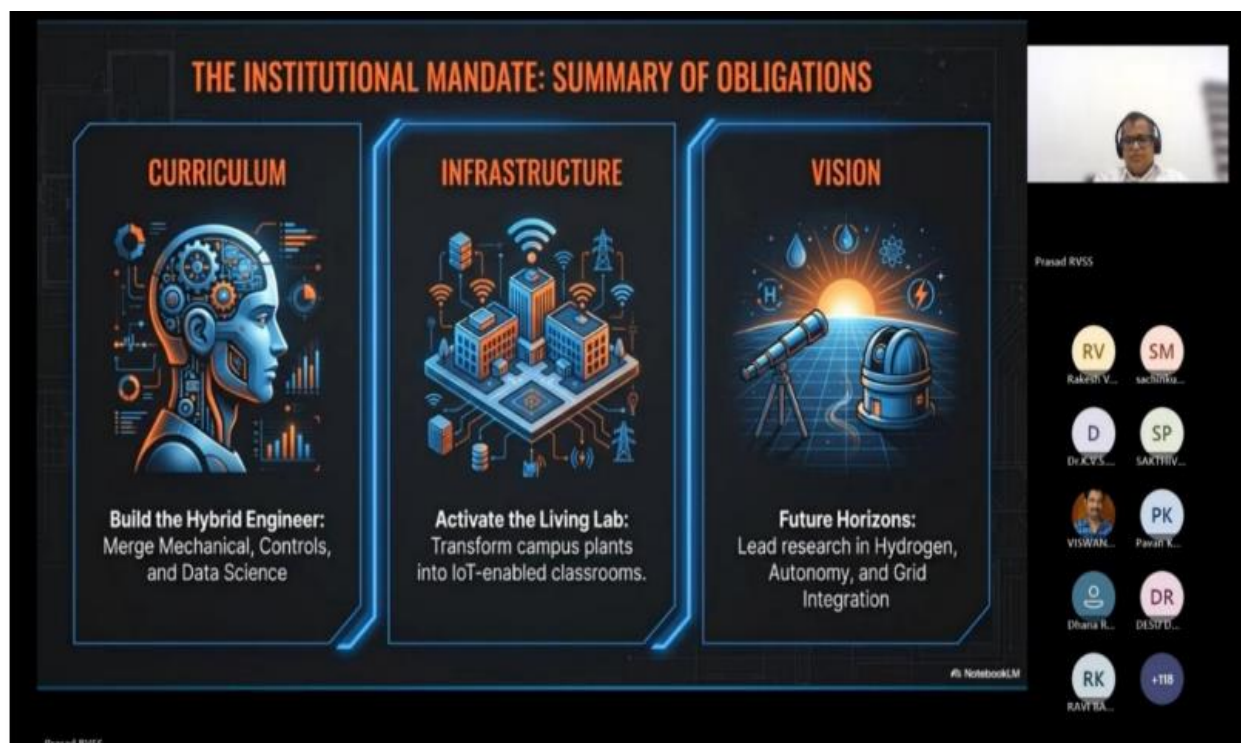
Lecture on “Application of Principal Component Analysis for Understanding Mechanical Structure in Automobile Performance”



Lecture by Dr. Akshay Pandey, IIITD&M, Jabalpur



Lecture by Dr.R.V.S.S. Prasad, Business Head, Pavani Engineers pvt. ltd. Hyderabad



Lecture on “Advancements in HVAC & R systems and applications”

GUEST LECTURE

- Department of Mechanical Engineering organized a Guest Lecture on “How to Publish in High Impact Journals” by Dr. Harish Venu on 23.03.2026 in CAD/CAM lab.



Lecture by Dr. Harish Venu on “How to Publish in High Impact Journals”



Felicitation to resource person by Dr.P.Ravindra Kumar and Dr.V.Dhana Raju

LAKSHYA 2026 (A NATIONAL TECHNICAL SYMPOSIUM)

- Dept. of Mechanical Engineering organized Lakshya 2026 a national level technical symposium on 03.01.2026.



LAHIREDDY BALI REDDY COLLEGE OF ENGINEERING

(An Autonomous Institution)

<https://lakshya.lbrce.ac.in>

LAKSHYA 2K26

Unveiling the future

19th National Level Technical & Cultural Fest

Organized by Student Council of LBRCE

Conveners

Dr. P. Bhagathi, HoD of AI&DS
Dr. M.B.S. Sreekar Reddy, HoD of ME

Central Coordinator

Dr. Ch. Rajendra Babu, Professor of AI&DS

SAUJANA PAPER PRESENTATION	PRAGNA POSTER PRESENTATION
UOBHAVANA IDENTITY	RANGA MARTHANDA CULTURALS
MEDHA QUIZ COMPETITION	OJAS SPECIAL EVENT

Prizes Worth 5 Lakhs

Registration Fee 200/- Per Event

Student coordinators			Faculty coordinators		
E. Narendra	ASE	7330774204	A. Pratiksh	ASE	9581880504
B. Karthik	AI&DS	9100561342	M. Kishore Kumar	AI&DS	9494942742
G. Pavan Kumar	CIVIL	9961260950	J. Rangalah	CIVIL	9848710910
Ch. Yashwanth	CSE	8309195151	M. Kiran Kumar	CSE	7891710792
G. Gokul Madhav	CSM (AI&ML)	9701692571	R. Chiranjeevi	CSM (AI&ML)	9030109114
J. Kushwanth Reddy	ECE	8639778964	Dr. B.Y.V.N.R Swamy	ECE	9989608302
P. Mohana Kishore	EEE	9182063042	K. S. L. Lavanya	EEE	9703494046
R. Lajwanth VPN	IT	9392750400	Dr. G. Rajendra	IT	9951226299
A. Kolinagu	MECH	7842815805	V. Sankara Rao	MECH	9493245354
Sk. Nawaz Sharif	MBA	7780162825	B. Kalpan Kumar	MBA	7075195978

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Lakshya 2026 Brochure



Poster Presentation participants along with Judges



Robo War prize distribution by Dr.P.Ravindra Kumar, Professor



Robo Race prize distribution by Dr.P.Ravindra Kumar, Professor

ALUMNI MEET

- Dept. of Mechanical Engineering organized a “Alumni Meet” on 14.02.2026 at 10 AM in SRK Hall.



Alumni Meet 2026 Invitation



Vuppala Sethu Ram (01761A0328) alumni interacting with second year students



Students with Alumni Vuppala Sethu Ram (01761A0328), Team Lead, Global Quest, Bangalore

INDUSTRIAL VISITS

- Department of Mechanical Engineering organized Industrial Visit for IV Semester Students to CIPET, Surampalli on 24.02.2026.



IV Sem students inside CIPET, Surampalli



IV Sem students in front of CIPET, Surampalli

- Department of Mechanical Engineering organized Industrial Visit for VI Sem students to Kumar Pumps, Tenali on 27.02.2026.



VI Sem students at Kumar Pumps, Tenali



VI Sem students at Kumar Pumps, Tenali

- Department of Mechanical Engineering organized Industrial Visit for ISHRAE students to “Air/water cooled chiller plant at PVR Mall, Vijayawada” on 28.02.2026.



ISHRAE students in front of Air/water cooled chiller plant



ISHRAE students at PVR Mall, Vijayawada

MOTIVATION CLASSES

- Dr. D. Venkateswarlu, Professor, dept. of MBA motivating students towards academics for VI Sem students in CAD/CAM lab on 26.02.2026.



Motivation class by Dr. D.Venkateswarlu, Professor



VI Sem students listening Motivation lecture towards Academics

- Dr. D. Venkateswarlu, Professor, dept. of MBA motivating students towards academics for IV Sem students in CAD/CAM lab on 13.03.2026.



Motivation class by Dr. D.Venkateswarlu, Professor



IV Sem students in motivation towards academics lecture

LAKSHYA 2026 SUCCESS MEET

- Lakshya 2026 success meet organized on 21.01.2026 in AI & DS seminar Hall at 4 to 5 PM.



Addressing by Principal Dr.K.Appa Rao



Faculty and student coordinators in Lakshya 2026 success meet



Faculty and student coordinators in Lakshya 2026 success meet

FACULTY ACHIEVEMENTS

- Dr.S.Pichi Reddy, Professor & Dean (R&D) acted as Judge in TATVA 2K26 a national level technical paper presentation on 06.03.2026 organized by S R Gudlavalleru Engineering College, Gudlavalleru.



Dr.S.Pichi Reddy, Professor & Dean (R&D) acted as Judge in TATVA 2K26

STUDENT ACHIEVEMENTS

- Mr.M.Sai Pratap Reddy, final year student participated in Inter State Youth Exchange Programme 2025-26 at Govt. Youth Hostel, Kochi from 22.01.2026 to 26.01.2026 organized by Mera Yuva Bharat, Ernakulam.



Appreciation by HoD-ME Dr.M.B.S.Sreekara Reddy

- The following are the list of students received academic merit certificates on 28th Annual Day Celebrations on 07.02.2026 for the A.Y 2024-25.

S. No.	Roll No.	Name of the Student	CGPA
1.	22765A0332	B.Ganesh	9.24

S. No.	Roll No.	Name of the Student	Year	GPA
1.	24761A0342	P.Uday Leela Pratap	I	9.01
2.	24765A0302	B.Surya Sandeep Veera Manikanta	II	9.64
3.	23765A0318	K.Ramanjaneyulu	III	9.26
4.	23765A0364	P.Indra Babu	III	9.14
5.	21761A0311	G.Sai Chaitanya Yaswanth	IV	9.5
6.	22765A0352	N.Appala Naidu	IV	9.55

- U.Maheswari (24761A0356), K.Nageswari (24761A0323), G.Joshitha (24761A0318) received second prize in “Design Contest” at PVP Siddhartha Institute of Technology, Kanuru on 28.02.2026.



Receiving of prize from HoD-ME Dr.B.Raghu Kumar, PVPSIT, Kanuru



Appreciation to winners by HoD-ME Dr.M.B.S.Sreekara Reddy, LBRCE, Mylavaram

- Mr.Ch.Hanu Raghava (22761A0307), IV year student received first place in traditional yoga held at Sardar patel stadium, Khammam during 10.02.2026 to 11.02.2026.



Appreciation by HoD-ME Dr.M.B.S.Sreekara Reddy to winner Mr.Ch.Hanu Raghava

- Mrs.A.Sravya (23761A0301), III Year received second prize of Rs.2000/- in Paper presentation on “IoT enabled smart electric bicycle” at SRGEC, Gudlavalleru on 06.03.2026.



A.Sravya receiving of prize from judges at SRGEC, Gudlavalleru

- Bandi Nataraju (24761A0307) and Yadhala Akhil (24761A0364) second year students got Third place in 15th AP State Senior Tennis ball Cricket Championship -2026 conducted at Ongole.



Appreciation by HoD-ME Dr.M.B.S.Sreekara Reddy and K.L.Prasad sports In-charge

- Mr.K.Mohana Krishna Kishore (24765A0305), III Year received second prize of Rs.1500/- in “CAD Modelling” competition at DhaneKula Institute of Engineering & Technology, Ganguru on 18.03.2026.



Mr.K.M.K.Kishore receiving of second prize in CAD modelling at DIET, Ganguru

- JNTUK KHO KHO Tournament 2025-26 at Gudlavalluru Engineering college, LBRCE secured SILVER Medal.



- U.Abhinav, A.Jagadeesh 23761A0303, B.Nataraju received third prize with Rs.10,000/- cash prize in Cricket Tournament organized by LBRCE.



Appreciation to prize winners by HoD-ME Dr. M.B.S.Sreekara Reddy

- SAEINDIA recognizes the formation of SAEINDIA collegiate club of Lakireddy Bali Reddy College of Engineering for A.Y 2025-26.

STUDENT PLACEMENTS

- The following VIII Sem students are placed in Pavani Engineers Industry, Hyderabad under ISHRAE student chapter with 4.2 Lakh package.





Appreciation to selected students by Principal Dr.K.Appa Rao, Dean (R&D) & HoD-ME

- The following VIII Sem students are placed in Jyoti CNC Automation Ltd. as Graduate Engineer Trainee with 3 Lakh package.

S. No.	Roll No.	Name of the student	Company
1.	22761A0320	Sai Prathap Reddy Marella	JYOTI CNC
2.	22761A0329	Venkateswara Reddy Pittu	JYOTI CNC
3.	22761A0334	Syed Galibshahid	JYOTI CNC
4.	23765A0308	Devarapalli Chinna Babu	JYOTI CNC
5.	23765A0315	Sasidhar Jayamangala	JYOTI CNC
6.	23765A0327	Lokesh Rangala	JYOTI CNC
7.	23765A0329	Ruttala Srinu	JYOTI CNC
8.	23765A0332	Shaik Hameed	JYOTI CNC
9.	23765A0342	Badigantla Mohan Kumar	JYOTI CNC
10.	23765A0343	Boppadala Hemanth Nagendra	JYOTI CNC
11.	23765A0348	Sai Teja Gummadi	JYOTI CNC
12.	23765A0354	Kiran Kumar Mangam	JYOTI CNC
13.	23765A0356	Marni Sri Rama Sai Vivekananda	JYOTI CNC
14.	23765A0357	Sadiq Mohammad	JYOTI CNC
15.	23765A0358	Ahmed Mohammed	JYOTI CNC
16.	23765A0361	Charan Sai Harshavardhan Reddy P	JYOTI CNC
17.	23765A0364	Papatla Indrababu	JYOTI CNC
18.	23765A0367	Rudrapati Pramodh	JYOTI CNC

19.	23765A0368	Balakrishna Reddy Seelam	JYOTI CNC
20.	23765A0372	Durga Prasad Vajja	JYOTI CNC
21.	23765A0373	Vallabhaneni Hemanth Kumar	JYOTI CNC
22.	23765A0375	Vemula Vasu	JYOTI CNC



LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING

A.Y: 2025-26

congratulations
For getting placed in



 22761A0320 MARELLA SAI PREETHAP REDDY	 22761A0334 SYED GALIB SHAHID	 23765A0308 DEVARAPALLI CHINNA BABU	 23765A0315 SASIDHAR JAYAMANGALA	 23765A0329 RUTTALA SRINU	 22761A0329 PITTU VENKATESWARA REDDY
 23765A0373 VALLABHANE NI HEMANTH KUMAR	 23765A0343 BOPPADALI HEMANTH NAGENDRA	 23765A0364 PAPATLA INDRA BABU	 23765A0361 PAIDIMARLA CHARAN SAI HARSHA VARDHAN REDDY	 23765A0332 SHAKE HAMEED	 23765A0356 MARNI SRI RAMA SAI VIVEKANANDA
 23765A0372 VAJJA DURGA PRASAD	 23765A0348 GUMMADI SAI TEJA	 23765A0327 LOKESH RANGALA	 23765A0358 AHMED MOHAMMAD	 23765A0342 BADIGANILA MOHAN KUMAR	 23765A0375 VEMULA VASU
 23765A0368 SEELAM BALAKRISHNA REDDY	 23765A0367 RUDRAPATI PRAMODH	 23765A0357 SADIQ MOHAMMAD	 23765A0354 MANGAM KIRAN	PACKAGE: 3.0LPA	

- The following VIII Sem students are placed in “Renacon AAC Blocks” with a package of 4.2 LPA.



- The following VIII Sem students are placed in IMEG with a package of 5 LPA.



STUDENT PARTICIPATIONS

- Mr.C.Durga Prasanth, Mr.A.Koti Nagu, Mr.G.Shanmukha Rao IV year students participated in “Project Expo” organized by SAE (I) Collegiate Club in S R Gudlavalleru Engineering College, Gudlavalleru on 21.02.2026.



Receiving of certificates from coordinators at SRGEC, Gudlavalleru

ACKNOWLEDGEMENTS

The department expresses sincere thanks to all faculty, technical staff and students for contribution towards the technical magazine- mech pulse.

