AERO CLUB
MLRIT

MLRIT
Raising Engineers

AEROX

VOLUME - I

JAN 2026

STUDENT CO -ORDINATOR'S

B.PRANAV- 23R21A2110
A.SAI PRANEETH- 23R21A2105
MOHD HUZAEF- 24R21A2139
MOHD RAZZAK- 24R21A2110

FACULTY COORDINATOR

MR. N. UDAY RANJAN GOUD

DEPARTMENT OF AERONAUTICAL ENGINEERING

From the earliest dreams of flight to the supersonic jets of today and the innovative aircraft of tomorrow, this discipline has consistently pushed the boundaries of what's possible. A field that has quite literally allowed humanity to touch the sky. MLR Institute of Technology offers Aeronautical Engineering that focuses on the design, development, construction, testing, and maintenance of aircraft and related systems that operate within Earth's atmosphere.

VISION

“To be a centre of excellence in Aeronautical Engineering with emphasis on Research & Innovation to serve the needs of industry with human values to build strong nation.”

MISSION

M1. Provide quality oriented education, well-grounded in the fundamental principles of Aeronautical Engineering.

M2. Consistently produce top quality Aeronautical engineers with core and multidisciplinary skills, who can become ace leaders and successful entrepreneurs with human values.

M3. Continuously undertake research and Innovation that will contribute to the industrial development of the nation.

HIGHLIGHT

DEPARTMENTAL ACHIEVEMENTS

STUDENT ACHIEVEMENTS

FACULTY ACHIEVEMENTS

PROGRAM EDUCATIONAL OBJECTIVES :

- **PEO 1:** To prepare the students to excel in Aeronautical engineering and mould their careers for successful employment in industrial, academic and entrepreneurial activities.

- **PEO 2:** Graduates will analyze and synthesize data and apply technical problem concepts which lead to the design of new products and develop technical problem solving skills.

- **PEO 3:** Graduates will have excellent communication skills, ethical attitude and an ability to relate engineering issues to broader social environment.

- **PEO 4:** To provide a passionate academic environment for students that encourage learning of emerging technologies, multi disciplinary areas and acquire leadership qualities.

PROGRAM SPECIFIC OUTCOMES(PSO'S) :

- **PSO1:** Apply engineering and management knowledge and techniques to estimate time and resources needed to complete Aerospace/Mechanical engineering projects.
- **PSO2:** Recognize the challenging and rewarding careers in the field of Aerospace Engineering.

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“ Innovation begins where curiosity meets courage, and engineering turns ideas into reality ”

DEPARTMENT EVENTS

DEPARTMENT OF AERONAUTICAL ENGINEERING ORGANIZED 8TH NATIONAL SCIENCE FAIR LUNAR ON 15/09/2025.

ORGANIZED A 7 DAYS **IAAA WINTER INTERNSHIP** FOR STUDENTS OF MAHENDRA UNIVERSITY

AEROX

"Your achievement is not just a milestone, it's a stepping stone for the future."

STUDENT ACHIEVEMENTS

DRONE DEVELOPMENT CHALLENGE 2025

TEAM JATAYU

TEAM PHOENIX

STUDENTS OF MLRIT AT KCG ENGINEERING COLLEGE,CHENNAI

- *15 students of 2nd year Aeronautical Engineering have certified in NPTEL course " Introduction to Airplane Performance" on 2025-09-21.*
- *TEAM "JATAYU , VARAHI , PHOENIX" have attended SAE DDC Workshop at NSS College of Engineering, Palakkad, Kerala on 27-28 Sep 2025.*
- *2nd year MD HUZEAF has participated in National integration Camp at Gujarath on 02/07/2025 to 09/07/2025.*
- *3nd year SHINEY PREMALATHA has recived 1st prize in painting on NSS Day Painting cometitions on 24/09/2025.*
- *2nd year Navya sri has participated in Anti Drug Awareness competition organized by NSS on 02/07/2025 at MLRIT.*
- *4th year SHAIK MAHABUB has participated in CPR Training program organized by NSS on 06/08/2025 at Arundathi Hospital, Dundigal.*
- *3rd year MRUDULA GIRHEPUJE has participated in CLOTH DONATION DRIVE organized by NSS on 14/08/2025 to 15/08/2025 at MLRIT.*
- *4th year J ANUSHA has participated in Eco friendly Ganeesha distribution organized by NSS on 26/08/2025 at MLRIT.*
- *3rd year ASHRITHA KARRE has participated in National Sports Day organized by NSS on 29/08/2025 at MLRIT.*
- *3rd year Kothapally Shiney Prema Latha has participated in Hyderabad liberation day competitions organized by NSS on 16/09/2025 at Rastarapathi Nilayam, Bollaram.*

MANSA FROM 4TH YEAR RECIVED AN AWARD OF APPRECIATION AT DISTRICT LEVEL YUVA UTSAV 2024-2025

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"A teacher's success is not measured by their knowledge, but by the success they inspire in others."

FACULTY ACHIEVEMENTS

“IF YOU ARE PLANNING FOR A YEAR, SOW RICE; IF YOU ARE PLANNING FOR A DECADE, PLANT TREES; IF YOU ARE PLANNING FOR A LIFETIME, EDUCATE PEOPLE”

- *Dr. Vivek Anand, Associate professor received Participation certicicate at IUCEE Annual Leadership Summit 2025 .*
- *Mr.A.Sai kumar, Assistant professor received appreciation for his participation in lecture meeting on Introduction to UAVs and Practical Design Tools on 6th sep 2025.*
- *Mr.N.Uday Ranjan Goud, Assistant professor received Certificate for appreciation for successfully completing Aerospace Structures Lab Digital course on 5th sep 2025*
- *Mr.N.Uday Ranjan Goud, Assistant professor has attended as a guest speaker on NSS Day at Geethanjali college of pharmacy on 26th sep 2025.*
- *Mr.N.Uday Ranjan Goud, Assistant professor has attended as a guest speaker, virtually on NSS Day at Rajapalayam Raju’s college ,Madurai , Tamil Nandu on 26th sep 2025.*
- *Mr. A Sai Kumar , Assistant professor Published a paper on “ConvNext Model based Classification of FUndus Retinal Images into Healthy Cataract” on 04/09/2025.*
- *Mr. Dr M S N Gupta, Head of the Department Published a paper on “Approximation of an Autonomous NavigationSystem in UAVs Based on Reinforcement Learning” on 27/05/2024*
- **Mr. Nirmith Kumar Mishra, Assistant Professor Published a Journal on “A Blockchain-Based Authentication Handover Protocol for Autonomous Vehicle Networks” On 26/07/2025..**

- ***Mr. A Sai Kumar, Assistant Professor Published a Journal on "Exhaust manifold performance enhancement usingnano fluids a design and CFD investigation for four stroke petrol engines." on 26/07/2025.***
- ***Mr. Nirmith Kumar Mishra, Assistant Professor Published a Journal on "A Blockchain-Based Authentication Handover Protocol for Autonomous Vehicle Networks" on 1 July 2025.***
- ***Mr. Dr M S N Gupta, Head of the Department Published a paper on "Numerical Investigation Using Machine Learning ProcessCombination of Bio PCM and Solar Salt for Thermal Energy Storage Applications" on 27/05/2024.***
- ***Mr. Nirmith Kumar Mishra, Assistant professor has attended FDP on Accreditation and Outcome Based Learning on 17-19 July 2025 at MLR Institute of Technology***
- ***Mr. B MANIDEEP, Assistant professor has attended FDP on AI in Education: Tools and Trends in Teaching from 15/09 to 20/09/2025 at MLR Institute of Technology.***
- ***Mr. A Sai Kumar, Assistant professor has attended FDP on Reimagining Media Education: The Role of Artificial Intelligence in Transforming Educational Practices from 7 to 13 July 2025 at Shri Ramswaroop Memorial University, Lucknow.***
- **Dr.Vivek Anand, Associate professor has Published a patent on "METHOD FOR ENHANCING WETTABILITY AND CORROSION RESISTANCE OF SS304 STEEL VIAMICROPATTERNS" on 25 July 2025**
- **Mr. Nirmith Kumar Mishra, Assistant professor has Published a patent on "AERODYNAMIC LANDING GEAR SYSTEM WITH DRAG REDUCTION FEATURES" on 25 July 2025.**

- ***Mr. Nirmith Kumar Mishra, Assistant professor has Published a patent on "THERMOELECTRIC ENERGY HARVESTING SYSTEM WITH AUTONOMOUS POWER ALLOCATION FOR DUAL-ZONE HEATRECOVERY IN AIRCAFT" on 1 Aug 2025. Mr. Nirmith***
- ***Kumar Mishra, Assistant professor has Published a patent on "MOBILE INSULIN COOLER" on 1 Aug 2025. Mr. K Arun***
- ***Kumar , Assistant professor has Published a patent on "FOAM-FILLED CORRUGATED CORE SANDWICH PANELS FOR ENHANCED STRUCTURAL PERFORMANCE" on 1 Aug 2025. Mr.***
- ***A Sai Kumar , Assistant professor has Published a patent on "THRUST MEASURING BED" on 1 Aug 2025.***

AWARDS

MR.N.UDAY RANJAN GOUD, ASSISTANT PROFESSOR RECEIVED CERTIFICATE FOR APPRECIATION FOR SUCCESSFULLY COMPLETING AEROSPACE STRUCTURES LAB DIGITAL COURSE ON 5TH SEP 2025

MR. N. UDAY RANJAN GOUD, ASSISTANT PROFESSOR, RECIVED A TOKEN OF APPRECIATION AT NATIONAL LEVEL CONFRENCE

AEROX

“Learning is amplified when students witness technology in action.”

INDUSTRIAL VISITES

“An Industrial visit transforms classroom theories of aerodynamics into the living reality of hangars, engines, and flight systems.”

INDUSTRIAL VISIT
AERONAUTICAL ENGINEERING

Visited: Indian Air Force Academy, Medak–Hyderabad Road, Dundigal, Telangana – 500043

An enriching industrial visit by Aeronautical Engineering students, gaining real-world exposure to the discipline, precision, and advanced technologies of the Indian Air Force.

Our visit to the Air Force Academy was an extraordinary experience that offered profound insights into the training, discipline, and operational excellence of India’s elite air warriors. We had the privilege of witnessing several awe-inspiring events that highlighted the precision, skill, and unwavering commitment of the Air Force personnel. The Passing Out Parade was a grand ceremonial spectacle, marking the culmination of rigorous training. It stood as a testament to the cadets’ discipline, teamwork, and readiness to join the proud ranks of the Indian Air Force. The event was further elevated by the mesmerizing aerobatic display of the Surya Kiran Aerobatics Team, whose synchronized maneuvers reflected mastery in precision flying and aerial coordination. Equally thrilling was the Akash Ganga Sky Diving demonstration, where paratroopers showcased their courage and expertise with flawless descents and precision landings. The air show reached its peak with the display of the Sukhoi Su-30 MKI, which executed high-G turns, vertical climbs, and dynamic rolls, demonstrating both the aircraft’s cutting-edge capabilities and the exceptional skill of its pilots. This visit not only deepened our technical understanding of aircraft systems and flight operations but also left us truly inspired by the professionalism, dedication, and spirit of service that define the Indian Air Force.

AEROX

"Fueling passion, shaping pilots of innovation."

AERO CLUB EVENTS

Aerotron 2.0 is a flagship event by Aero Club MLRIT, tailored for students passionate about aerospace technology and UAV innovation. The centerpiece of the event is a hands-on workshop and hackathon, where participants design, build, and test their own RC fixed-wing UAVs from scratch. Guided by experts, students gain practical knowledge in aerodynamics, aircraft design, electronics, and flight control systems. The event blends learning with competition, offering an immersive platform that fosters teamwork, creativity, and real-time problem-solving. Aerotron 2.0 is where curiosity takes flight and ideas become innovation.

AEROTRON 2.0

AEROTRON 2.0

"Fueling dreams, powering flight—Aero Club takes you higher."

Aerotron 2.0, organized by Aero Club MLRIT, is a premier aerospace event designed for students passionate about UAVs and flight technology. The event features a unique hands-on workshop and hackathon, where participants design, build, and fly RC fixed-wing UAVs from scratch. Guided by experts, students explore aerodynamics, aircraft design, electronics, and flight control systems through practical learning. The competitive challenges encourage teamwork, creativity, and real- time problem-solving. More than just a workshop, Aerotron 2.0 is a platform that transforms curiosity into innovation. It is where ideas take wing and the future of aerospace begins.

LUNAR 2025

LUNAR 2025, the 8th National Science Fair organized by Aero Club MLRIT, was celebrated on National Science Day, February 28th, bringing together schoolchildren from across Hyderabad and nearby regions. The event provided a vibrant platform for students to showcase innovative projects, scientific models, and creative ideas in science, technology, and aerospace. The occasion was graced by Chairman Marri Lakshman Reddy, Principal Srinivas Rao, and Dean Radhika Mam, whose presence motivated the participants and highlighted the importance of nurturing young scientific talent. After an engaging series of presentations and demonstrations, the best projects were recognized during the prize distribution ceremony, with winners receiving awards, certificates, and appreciation. Through interactive sessions, workshops, and competitions, the fair encouraged students to think critically, innovate boldly, and explore the wonders of science. LUNAR 2025 at MLRIT successfully captured the spirit of National Science Day, inspiring the next generation of innovators and scientists.

"“Science is global. Einstein’s equation, $E=mc^2$, is not dependent on any culture. Science is a borderless pursuit.”"