ECE-DEPARTMENT
NEWS LETTER/MAGAZINE

ELECTRO PULSE

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CHAIRMAN MESSAGE

The pride of every student and staff would be in his/her college. A college magazine reach heights of glory but without materials like a college magazine the outside world may not know of it. The role of a college magazine is to promoting what an institution offers. It brings out into the open things which are unrevealed. It brings to light the names of the unsung heroes and their mighty deeds. I am happy that there is a dedicated team of staff and students who have brought out the magazine of our college. They have presented the stupendous achievements of Marri Laxman Reddy Institute of Technology & Management in the fields of academies, research, sports and extra-curricular activities, in a nice way. Dazzle represents the collective work of team. I wish the magazine a grand success.

PRINCIPAL MESSAGE

It is a great pleasure to see the creative expressions of students who had contributed to ZENITH. MLRITM has grown abundantly in the recent past. It continues to sustain its growth. People reading this magazine will realize the tremendous changes that are happening in the MLRITM campus. The magazine is presenting a glimpse of the growth of the institution on many fronts. The college has been simply unstoppable in its progress as it has been actively involved in various activities that have brought to light the hidden talents of the college students and staff. The highly qualified and dedicated members of staff have always stood shoulder with the management and have carried out their duties with a level of commitment. This magazine has recorded achievements of staff members and students. They stand as a witness to the monumental efforts taken by the management to make the college a center of excellence in education and research. I wish the management, staff and students of the college success in their future endeavors.

HOD MESSAGE

I am happy to learn that MLRITM College of Engineering is coming out with the half yearly college magazine. Efforts such as this will provide an opportunity for the staff and students to showcase their talents in technical writing, essay and poetry writing, sketching and drawings, among others. Such value additions are very much essential for the young technocrats, engineers and scientists, who the college products, to demonstrate their ideas for a developed India. I sincerely appreciate and congratulate the Chairman, Principal, the editorial team and the entire management of the college for their unrelenting efforts in compiling this magazine.

![Marri Laxman Reddy Institute of Technology and Management logo]

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

Vision of the Institute

To be a globally recognized institution that fosters innovation, excellence, and leadership in education, research, and technology development, empowering students to create sustainable solutions for the advancement of society.

Mission of the Institute

To foster a transformative learning environment that empowers students to excel in engineering, innovation, and leadership.

To produce skilled, ethical, and socially responsible engineers who contribute to sustainable technological advancements and address global challenges.

To shape future leaders through cutting-edge research, industry collaboration, and community engagement.

Quality Policy

The management is committed in assuring quality service to all its stakeholders, students, parents, alumni, employees, employers, and the community.

Our commitment and dedication are built into our policy of continual quality improvement by establishing and implementing mechanisms and modalities ensuring accountability at all levels, transparency in procedures, and access to information and actions.

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Vision of the Department

To provide quality technical education in Electronics and Communication Engineering through research, innovation, striving for global recognition in specified domain, leadership, and sustainable societal solutions.

Mission of the Department

- **DM1:** To create a transformative learning environment that empowers students in electronics and communication engineering, fostering excellence in technical skills and leadership.
- **DM2:** To drive innovation through research, deliver a transformative education grounded in ethical principles, and nurture the development of professionals
- **DM3:** To cultivate strong industry partnerships, and engaging actively with the community for societal and technological progress.

Program Educational Objectives (PEO)

PEO 1: Have successful careers in Industry.

PEO 2: Show excellence in higher studies/ Research.

PEO 3: Show good competency towards Entrepreneurship.

Program Outcomes (POs)

Engineering Graduates will be able to:

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

2. **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.

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3. **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.

4. **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.

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

6. **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.

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

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

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

10. **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.

11. **Project management and finance**: Demonstrate knowledge and underst and ing 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.

12. **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.

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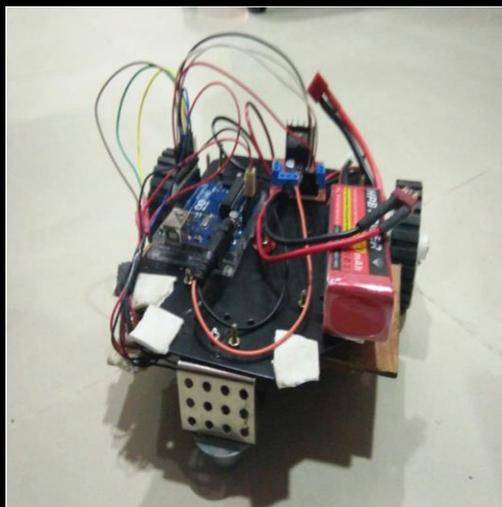Accredited by NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

Program Specific Outcomes (PSOs)

1. Analyze and design analog & digital circuits or systems for a given specification and function.
2. Implement functional blocks of hardware-software co-designs for signal processing and communication applications.

Tech Fest – UTHKRISHT 2022

Students participating in Tech Feast

Students from final year ECE have secured first place in CAR – WRESTLING competition organized by Tech Fest – UTHKRISHT 2022, MLRITM

Student Achievements

Name of the student	Cont/ Fest	Event	Place	Awards/ Prizes
Ch. Tharun Jaindhra lokesh	Technical fest	Robo War	JNTU Hyderabad	3rd
Rakesh reddy Bhavani Nikhil Sudha rani	Technical fest	Robo War	JNTU Hyderabad	2nd
Satwick Akhya Ch. Srujana P vyshanavi chandu	Technical fest	Robo War	JNTU Hyderabad	1st
K rakesh reddy Jagadeesh M manoj kumar K eshwar	Technical fest	Robotics	LMNIIT	1st
Vishal kakshi K Nikhil R k jayendra K Eshwar	Technical fest	Evolvex	IIT Hyderabad	1st
Manish reddy K Eshwar Ch. Tarun Rakesh reddy Jayendra	Technical fest	JUNK YARD WARS	NIT warangal	1st
Likitha A lakeshwar rao	Technical fest	Line follower	NIT warangal	2nd

Industrial Visits

Students of III year B.Tech ECE have gone for an Industrial visit to BHARAT SANCHAR NIGAM LIMITED-REGIONAL TRAINING TELECOM CENTRE (BSNL RTTC) located at Gachibowli, Hyderabad

Vision and Mission of the Department

Our Vision

Imparting quality technical education through research, innovation and team work for a lasting technology development in the area of Electronics and Communication Engineering.

Our Mission

To develop a strong centre of excellence for education and research with excellent infrastructure and well qualified faculties to instill in them a passion for knowledge.

To achieve the Mission the department will

1. Establish a unique learning environment to enable the students to face the challenges of the Electronics and Communication Engineering field.
2. Promote the establishment of centre of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students.
3. Provide ethical and value based education by promoting activities addressing the societal needs.
4. Enable students to develop skills to solve complex technological problems of current times and also provide a framework for promoting collaborative and multidisciplinary activities.

PEO's & PO's

PROGRAMME EDUCATIONAL OBJECTIVES

PEO 1: Have successful **careers in Industry.**

PEO 2: Show excellence in **higher studies/ Research.**

PEO 3: Show good competency towards **Entrepreneurship.**

PROGRAM OUTCOMES

a	An ability to apply knowledge of Science, Mathematics, Engineering & Computing fundamentals for the solutions of Complex Engineering problems
b	An ability to identify, formulates, research literature and analyze complex engineering problems using first principles of mathematics and engineering sciences.
c	An ability to design solutions to complex process or program to meet desired needs.
d	Ability to use research-based knowledge and research methods including design of experiments to provide valid conclusions.
e	An ability to use appropriate techniques, skills and tools necessary for computing practice.
f	Ability to apply reasoning informed by the contextual knowledge to assess social issues, consequences & responsibilities relevant to the professional engineering practice.
g	Ability to understand the impact of engineering solutions in a global, economic, environmental, and societal context with sustainability.
h	An understanding of professional, ethical, Social issues and responsibilities.
i	An ability to function as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
j	An ability to communicate effectively on complex engineering activities within the engineering community.
k	Ability to demonstrate and understanding of the engineering and management principles as a member and leader in a team.
l	Ability to engage in independent and lifelong learning in the context of technological change.

PROGRAM SPECIFIC OUTCOMES

PSO1	Analyze and design analog & digital circuits or systems for a given specification and function.
PSO2	Implement functional blocks of hardware-software co-designs for signal processing and communication applications.

"Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away."

- Antoine de Saint-Exupery