



**MARRI LAXMAN REDDY**  
**INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

**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 academics, research, sports and extra-curricular activities, in a nice way. Dazzle represents the collective work of team. I wish the magazine 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

## HOD MESSAGE



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.

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.



### **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**

- Ensure excellence in education through innovative teaching and continuous improvement.
- Promote ethical, skilled, and employable graduates who drive sustainable technologies.
- Encourage research, industry collaboration, and community engagement for societal benefit.



### **Vision of the Department**

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

### **Mission of the Department**

**M1:** Establish a unique learning environment to enable the students to face the challenge of the Electronics and Communication Engineering field.

**M2:** Promote the establishment of centre of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students.

**M3:** Provide ethical and value-based education by promoting activities addressing the societal needs.

**M4:** Enable students to develop skills to solve complex technological problems of current times and provide a framework for promoting collaborative and multidisciplinary activities.

### **Educational Objectives (PEO) for the UG Program**

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) for the UG Program**

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.
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:** Understand 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 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.
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.

**Program Specific Outcomes (PSOs) for the UG program**

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.

**Program Educational Objectives (PEOs) for the PG program**

- PEO1: To build successful careers in embedded systems and related domains through the effective application of technical knowledge in academia, industry, and entrepreneurship.
- PEO2: To promote research, innovation, and problem-solving abilities by understanding industrial requirements and emerging technologies for real-world applications.
- PEO3: To enhance professional competency and career growth through continuous learning, ethical practices, and global adaptability.
- PEO4: To demonstrate leadership, professionalism, teamwork, and effective communication skills in multidisciplinary environments.



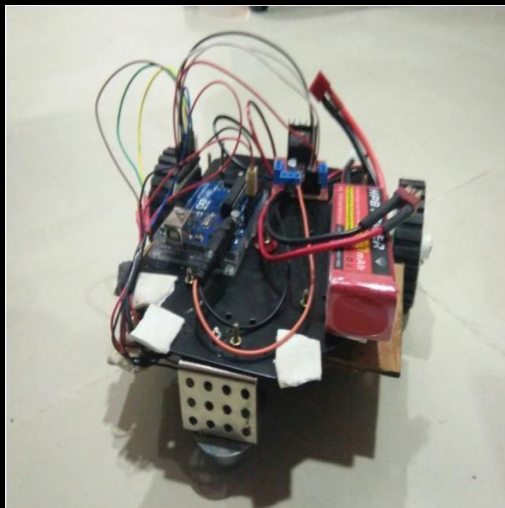
**Program Outcomes (POs) for the PG program**

- 1. Research / Investigation:** An ability to independently carry out research /investigation and development work to solve practical problems.
- 2. Report Preparation:** An ability to write and present a substantial technical report/document
- 3. Domain Mastery (Embedded Systems):** Students should be able to demonstrate a degree of mastery in Embedded Systems
- 4. Application of Engineering Principle:** Acquire and apply engineering principles to design embedded systems and processes that address complex real-world problems.
- 5. Modern Tools & Societal Impact:** Use modern tools to conduct experiments, apply technical skills, and develop solutions for societal challenges and sustainable development.
- 6. Lifelong Learning & Adaptability:** Recognize the value of lifelong learning and proactively engage in ongoing professional development by embracing and integrating emerging technologies.

# Tech Fest – UTHKRISHT 2022



*Students participating in Tech Fest*



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	Coed/ Fest	Event	Place	Awards/ Prizes
Ch. Tharun Jandhra Jokesh	Technical fest	Robo War	JNTU Hyderabad	3 <sup>rd</sup>
Rakesh reddy Bhavani Nahil Sudha rani	Technical fest	Robo War	JNTU Hyderabad	2 <sup>nd</sup>
Sateek Aleky Ch. Snjana P vyshanavi shandu	Technical fest	Robo War	JNTU Hyderabad	1 <sup>st</sup>
K rakesh reddy Jagadeesh M manoj kumar K eshwar	Technical fest	Robotics	LMNIT	1 <sup>st</sup>
Vishal kakshi K Nahil R k jayendra K Eshwar	Technical fest	Evolves	BIT Hyderabad	1 <sup>st</sup>
Manish reddy K Eshwar Ch. Tarun Rakesh reddy Jayendra	Technical fest	JUNK YARD WARS	NIT warangal	1 <sup>st</sup>
Likitha A lakeshwar rao	Technical fest	Line follower	NIT warangal	2 <sup>nd</sup>

# 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 For UG Program

## PROGRAMME EDUCATIONAL OBJECTIVES FOR UG PROGRAM

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

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

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

## PROGRAM OUTCOMES FOR UG PROGRAM

- a An ability to apply knowledge of Science, Mathematics, Engineering & Computing fundamentals for the solutions of Complex Engineering problems
- b An ability to identify, formulate, 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 FOR UG PROGRAM

- 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.

## **PROGRAMME EDUCATIONAL OBJECTIVES FOR PG PROGRAM**

**PEO1: To achieve professional success in the embedded systems domains by applying technical knowledge in academic, industry and entrepreneurial roles.**

**PEO2: To excel in research and innovation through deep understanding of industrial needs and emerging technologies for developing real-world solutions.**

**PEO3: To improve knowledge and skills for career growth by upholding integrity and embracing lifelong learning globally.**

**PEO4: To exhibit leadership, professionalism, and communication skills in multidisciplinary towards the sustainable development.**

## **PROGRAM OUTCOMES (POS) FOR THE PG PROGRAM**

1. **Research / Investigation:** An ability to independently carry out research /investigation and development work to solve practical problems.
2. **Report Preparation:** An ability to write and present a substantial technical report/document
3. **Domain Mastery (Embedded Systems):** Students should be able to demonstrate a degree of mastery in Embedded Systems
4. **Application of Engineering Principle:** Acquire and apply engineering principles to design embedded systems and processes that address complex real-world problems.
5. **Modern Tools & Societal Impact:** Use modern tools to conduct experiments, apply technical skills, and develop solutions for societal challenges and sustainable development.
6. **Lifelong Learning & Adaptability:** Recognize the value of lifelong learning and proactively engage in ongoing professional development by embracing and integrating emerging technologies.

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

**- Antoine de Saint-Exupery**



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LAXMAN  
REDDY**

**GROUP OF INSTITUTIONS**

**MARRI LAXMAN REDDY GROUP OF INSTITUTIONS**

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