EMPOWERING THROUGH INNOVATIONS

MLRS

# MARRI LAXMAN REDDY
## INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

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

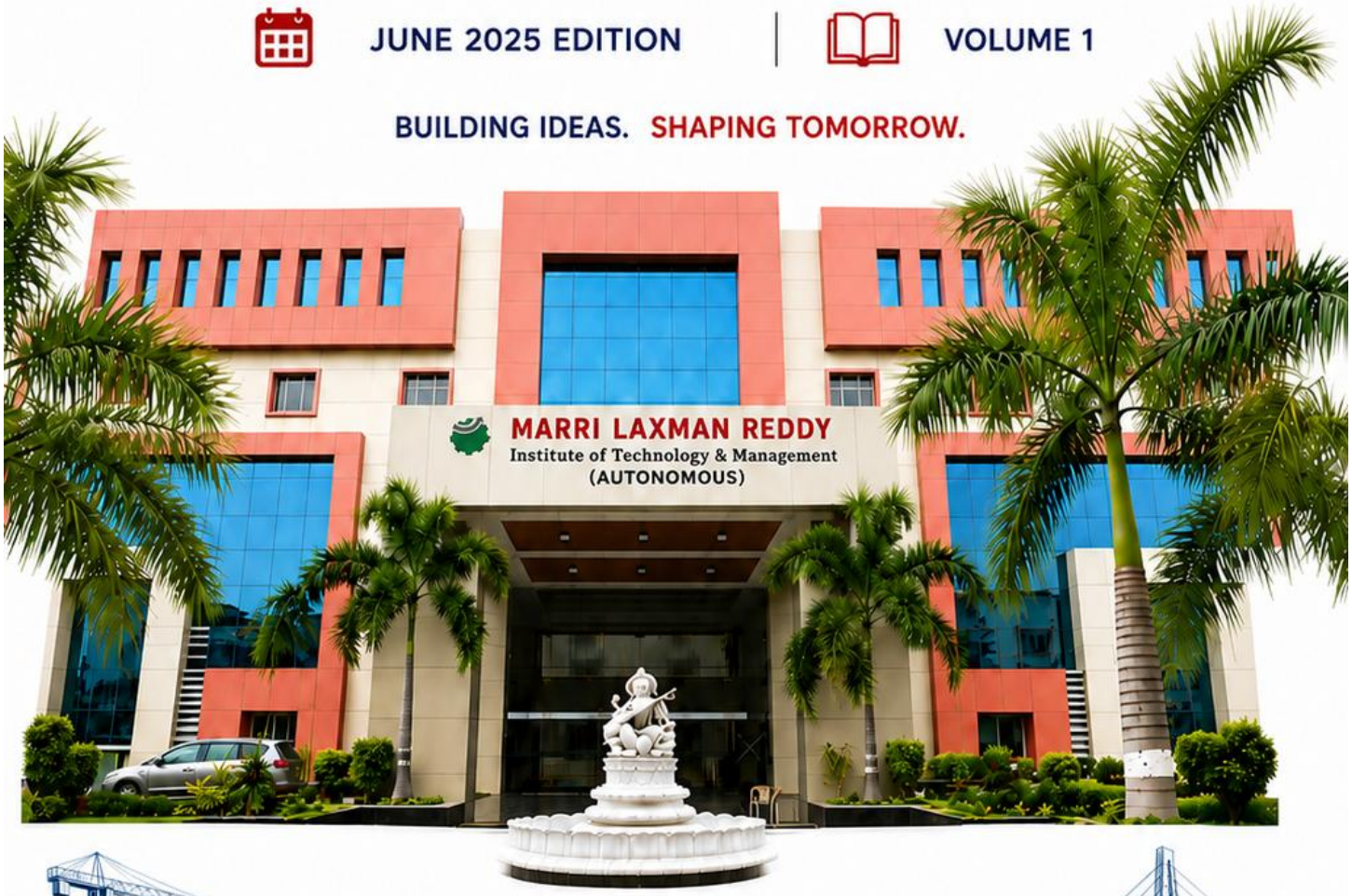
Accredited with 'A' Grade by NAAC

# INQUEST

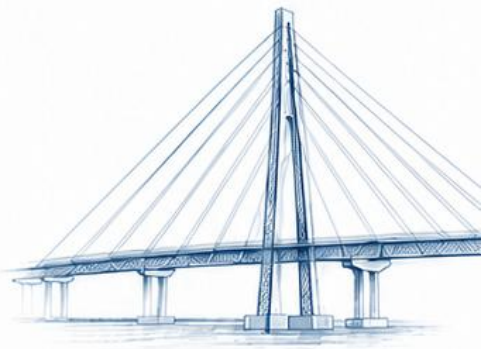
THE OFFICIAL MAGAZINE OF THE DEPARTMENT OF CIVIL ENGINEERING

JUNE 2025 EDITION | VOLUME 1

BUILDING IDEAS. SHAPING TOMORROW.




## DEPARTMENT OF CIVIL ENGINEERING



Learn | Innovate | Build | Sustain

SUSTAINABLE FUTURE | SMART DESIGN SOLUTIONS | STRONGER INFRASTRUCTURE | BETTER TOMORROW

# EDITORS PAGE

| Student Editorial Team | |
|---|---|
| **CHEGURI YASHWANTH REDDY** | **247Y1D2003** |
| **JALLA KOUSHIK** | **247Y1D2007** |
| **RIKKULA ASHWANTH** | **247Y1A0105** |
| **CHEGURI NIKITHA** | **247Y1A0115** |
| **KODAKANCHI KARTHIK** | **247Y5A0104** |

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|---|---|
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| **Ms.T Neha** | **Asst. Professor** |
| **Mr.N.Krishna Rao** | **Asst. Professor** |
| **Mr.T.Prasad** | **Asst. Professor** |

It gives us immense pleasure to present **INQUEST**, the official magazine of the **Department of Civil Engineering**. This edition stands as a reflection of the collective intellect, creativity, and technical excellence of our students and faculty. It is not merely a compilation of articles, but a platform that captures the spirit of innovation, inquiry, and continuous learning that defines our department.

Civil Engineering, being the backbone of infrastructure development, demands a perfect blend of theoretical knowledge, practical exposure, and innovative thinking. Through **INQUEST**, we aim to showcase this blend by highlighting student achievements, technical articles, research insights, outreach activities, and creative expressions. Each contribution in this magazine represents the dedication, curiosity, and hard work of our students who strive to excel in both academic and professional domains.

This magazine also reflects the department's commitment to **Outcome-Based Education (OBE)**, industry collaboration, and sustainable development. The inclusion of activities such as technical fests, outreach programs, international collaborations, and student innovations demonstrates our continuous efforts to bridge the gap between classroom learning and real-world applications.

We extend our sincere gratitude to the management, faculty members, and all contributors who have supported us in bringing out this edition successfully. Their guidance and encouragement have played a vital role in shaping this publication.

We hope that **INQUEST** serves as a source of inspiration, knowledge, and motivation for all readers. May it continue to encourage young minds to explore, innovate, and contribute towards building a sustainable and resilient future.

# INSPIRE LEADERS

**Sri Marri Laxman Reddy**
**Chairman, MLRITM**

The pride of every student and staff would be in his/her college. A college may 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 therefore vital in promoting what an institution offers. It brings out into the open things hitherto 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 the team. I wish the magazine a grand success.

**Ms Anu Shreya Reddy**
**Secretary, MLRITM**

It is happiness unlimited to see Marri Laxman Reddy Institute of Technology & Management breaking barriers and moving forward confidently. The adage "Fortune favors the bold" is very true in the case of MLRITM. There is nothing… absolutely nothing that stops the MLRITM juggernaut from rolling forward, going on boldly from one project to another… leaving the spectators spell-bound. Everything that MLRITM touches turns into gold. All these things have been made possible by the extraordinary vision and the immaculate planning of our chairman, which when coupled with the skills of the staff have made the college scale new highs. This magazine brings out the notable achievements of MLRITM. I am sure that through these pages readers will get a bird's eye view of MLRITM and its wonders.

**Dr. P Sridhar**
**Director, MLRITM**

It is a pleasure to witness the creative contributions of students in INQUEST. The magazine reflects the steady growth of MLRITM and highlights key achievements in academics, research, and innovation across the campus. It showcases conferences, competitions, and student projects guided by dedicated faculty, reflecting the collective efforts of the institution. The content of this magazine also demonstrates the enthusiasm, creativity, and commitment of students towards continuous learning and professional development. It serves as a platform for young minds to express their ideas, share knowledge, and develop a spirit of collaboration and innovation. Such initiatives play a vital role in nurturing technical competence and holistic growth among students. I extend my best wishes to the management, staff, and students for continued success in their future endeavors.

**Dr. K Murali**
**HoD-CE MLRITM**

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 writings, sketching and drawings, among others. Such value additions are very much essential for the young technocrats, engineers and scientists, who the college produces, 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.

# DEPARTMENT INSIGHTS

## Institution Vision

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.

## Institution Mission

- 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.

## Vision of the Civil Engineering Department

To empower students to be skilled, competitive and dedicated Civil Engineers by imparting advanced technical knowledge and ethical values, equipping them to play a key role in the planning and execution of the nation's infrastructure and development activities.

## Mission of the Civil Engineering Department

**M1:** Provide quality education in civil engineering through a combination of excellent teaching, advanced facilities, and continuous mentorship.
**M2:** Produce civil engineering graduates who demonstrate strong skills and expertise.
**M3:** Encourage professional development to address complex technical challenges and engage in innovation with creativity, leadership, ethics, and social awareness.

## M.Tech Structural Engineering Program Educational Objectives (PEOs )

| | |
|---|---|
| **PEO1** | Equip for success in the engineering domain through a strong foundation in structural engineering and advanced design skills. |
| **PEO2** | Foster industrial awareness and a research-oriented mindset by engaging with emerging trends and technologies in structural engineering. |
| **PEO3** | Prepare for successful employment by developing professional ethics and critical thinking to address evolving societal needs. |
| **PEO4** | Develop leadership qualities to excel in professional and societal environments, contributing responsibly and ethically. |

## M.Tech Structural Engineering Program Outcomes (POs )

| | |
|---|---|
| **PO1** | **Research/ investigation:** Independently carry out research /investigation and development work to solve practical problems |
| **PO2** | **Report Preparation:** Write and present a substantial technical report/document |
| **PO3** | **Domain Mastery:** Demonstrate a degree of mastery over the area in Structural Engineering |
| **PO4** | **Multi-Disciplinary Knowledge:** Impart core and interdisciplinary knowledge for analyzing and solving complex problems in structural engineering and related domains. |
| **PO5** | **Design and Sustainability:** Conceptualize and design safe, efficient, and sustainable civil engineering structures in social, economic, and environmental factors. |
| **PO6** | **Lifelong Learning and Professional Development:** Engage in lifelong learning through continuous education, research, and professional development. |

# DEPARTMENT INSIGHTS

## B.Tech Civil Engineering Program Educational Objectives (PEOs )

| | |
|---|---|
| **PEO1** | **Professional Excellence**<br>Analyze, design, build, maintain, or improve civil engineering-based systems, considering environmental, economic, and societal requirements. |
| **PEO2** | **Multidisciplinary Approach**<br>Develop a strong educational foundation to design and conduct experiments, meeting needs within multidisciplinary constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability, while analyzing and interpreting data. |
| **PEO3** | **Continued Self-Learning**<br>Identify, formulate, and solve engineering problems, and engage in lifelong learning in advanced areas of civil engineering and related fields. |
| **PEO4** | **Effective Contribution to Society**<br>Utilize modern engineering techniques, skills, and tools necessary for civil engineering practice, serving the community as ethical and responsible professionals. |

## B.Tech Civil Engineering Program Outcomes (POs )

| | |
|---|---|
| **PO1** | **Engineering knowledge:** Apply knowledge of mathematics, natural science, comput-<br>ing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems. |
| **PO2** | **Problem analysis:** Identity, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustain-<br>able development. (WK1 to Wk4) |
| **PO3** | **Design/development of solutions:** Design creative solutions for complex engineering problems and design /develop systems / components /processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon,<br>culture, society and environment as required (WK5) |
| **PO4** | **Conduct investigations of complex problems:** Conduct investigations of complex en- gineering problems using research-based knowledge including design of experiments,<br>modeling, analysis & interpretation of data to provide valid conclusions (WK8) |
| **PO5** | **Engineering Tool Usage:** Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modeling recognizing their<br>limitations to solve complex engineering problems. (WK2 and WK6). |
| **PO6** | **The Engineer and the world:** Analyze and evaluate societal and environmental aspects while solving complex engineering for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and<br>WK7). |
| **PO7** | **Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws (WK9). |
| **PO8** | **Individual and Collaborative Tem work:** Function effectively as an individual, and as<br>a member or leader in divers/multidisciplinary teams. |
| **PO9** | **Communication:** Communicate effectively and inclusively within the engineering com- munity and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language,<br>and learning differences. |
| **PO10** | **Project Management & Finance:** Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as member and leader in a team, and to manage projects and in multidisciplinary<br>environments. |
| **PO11** | **Life-Long Learning:** Recognize the need for and have the preparation and ability for<br>i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8) |

## B.Tech Civil Engineering Program Specific Outcomes (PSOs )

| | |
|---|---|
| **PSO1** | Design, develop, fabricate and commission the electrical systems involving power generation, transmission, distribution and utilization. |
| **PSO2** | Focus on the components of electrical drives with its converter topologies for energy conversion, management and auditing in specific applications of industry and sustainable rural development. |
| **PSO3** | Gain hands-on competency and computing tool skills required for entry-level engineering positions. |

# ALUMNI SPEAKS

## Voice That Inspire

Our alumni are our pride. Their achievements and words continue to motivate and guide the younger generation

### Mr. D Chaitanya Kumar
**M.Tech Structural Engineering**
**2021-23 Batch**

Roll No:
217Y1D2002
Company:
Tejas Interiors
Designation:
Marketing Excutive

"MLRITM provided me with strong technical knowledge, practical exposure, and confidence that helped me begin my professional journey successfully. The guidance from faculty and industry-oriented learning played a key role in shaping my career. The department encouraged innovation, teamwork, and continuous learning throughout the course. I am grateful to the faculty members for their constant support and motivation."

### Mr. N Bharat
**M.Tech Structural Engineering**
**2022-24 Batch**

Roll No:
227Y1D2006
Company:
Sathwik constructions
Designation:
Senior Engineer

"The M.Tech Structural Engineering program enhanced my analytical and problem-solving skills. The supportive faculty, laboratories, and project work prepared me to handle real-time challenges in the construction industry. The knowledge and experience gained at MLRITM continue to help me in my professional career."

### Mr. Amgoth Pavan
**M.Tech Structural Engineering**
**2021-23 Batch**

Roll No:
217Y1D2001
Company:
NFC Hyderabad
Designation:
Civil Site Engineer

"My time at MLRITM helped me develop both technical expertise and professional ethics. The academic environment and continuous encouragement from the department motivated me to achieve my career goals. The curriculum and project activities provided valuable industry exposure and confidence. I proudly cherish the memories and learning experiences gained during my M.Tech journey at MLRITM."

### Mr. Mohd Abdul Imran
**B.Tech Civil Engineering**
**2018-22 Batch**

Roll No:
197Y5A0101
Company:
East London University
Designation:
Ms construction engineering

"MLRITM provided me with a strong academic foundation and practical exposure in civil engineering. The support from faculty members and project-based learning enhanced my technical and professional skills. The knowledge gained during my B.Tech journey continues to help me in my higher studies and career growth."

### Ms.Tanuja putta
**B.Tech Civil Engineering**
**2018-22 Batch**

Roll No:
197Y5A0103
Company:
Axis Energy Ventures India Private Limited
Designation:
Executive - Survey & Autocad Engineer

"The Department of Civil Engineering at MLRITM helped me improve my technical knowledge and communication skills. The practical learning approach, laboratory sessions, and faculty guidance prepared me to handle industry challenges confidently. I am thankful to the institution for providing a supportive environment for my professional development."

### Mr. Yerram Chakrish
**B.Tech Civil Engineering**
**2018-22 Batch**

Roll No:
197Y5A0104
Company:
Srivyoma Atelier Interiors
Designation:
Founder & Entrepreneur

"My experience at MLRITM motivated me to think creatively and pursue entrepreneurial goals. The department encouraged innovation, teamwork, and practical learning throughout the course. The skills and confidence gained during my B.Tech program played a vital role in shaping my professional journey."

# VIEWS OF PLACED STUDENTS

**Campus Dreams to career sucess**

Transforming academic aspirations into
successful professional careers

## "Stepping Towards Success"

MLRITM provided me with excellent learning opportunities and continuous support from faculty members. The placement training sessions and technical guidance improved my confidence and communication skills. The experience gained during my B.Tech journey helped me achieve my career goals successfully.

**237Y1D2010-** BASHETTY SANDEEP – **DECORPOT**

## "Career Goals Achieved"

Being placed in a reputed company was a proud moment in my academic journey. The supportive environment at MLRITM encouraged me to improve my technical and professional abilities. I sincerely thank the faculty and placement cell for their constant encouragement and guidance.

**237Y1D2009-BATTINA SAI KRISHNA GOUD-ADVANTAGE ONE TAX CONSULTING PVT LTD**

## "Strength Through Learning"

The B.Tech Civil Engineering program at MLRITM provided me with strong technical knowledge and practical exposure through projects and laboratory sessions. The support from faculty members and placement activities enhanced my confidence and professional skills. I am grateful to the department for helping me build a successful career path.

**227Y5A0103- BHASKAR KATRAVATH- GATE Ranker**

## "Towards a Bright Future"

My journey at MLRITM helped me strengthen my technical, communication, and problem-solving skills. The workshops, training sessions, and guidance from faculty members prepared me to face professional challenges confidently. The knowledge gained during the course continues to support my career growth.

**217Y1A0112- K ROHIT SINGH-AMPLE LOGIC**

## "An Inspiring Learning Experience"

The Department of Civil Engineering at MLRITM provided me with a supportive learning environment and valuable practical exposure. Technical events, project work, and placement activities improved my industry readiness and confidence. I sincerely thank the faculty and mentors for their continuous support and motivation.

**227Y5A0108-MANIKANTA SAI-ENLIST MANAGEMENT CONSULTANTS**

# STUDENTS CORNER

**Ideas* Imagination*Innovation**

A Glimpse of thoughts Creativity and technical prospectives from the students of Department of Civil Engineering

## POEM

### Civil Engineers – Green Buildings

Green buildings rise with strength and grace,
bringing sunlight, fresh air, and nature together
to create a healthier and more sustainable world
for future generations.

With solar energy, rainwater harvesting, eco-
friendly materials, and smart design, they reduce
pollution, conserve resources, and protect the
beauty of our environment.

Engineers and architects shape these structures
with innovation and responsibility, proving that
development and environmental protection can
progress hand in hand.

Every green building stands as a symbol of hope,
inspiring humanity to build smarter, live cleaner,
and preserve the Earth for generations to come.

**237Y1D2012-C RAVI KUMAR**


**247Y1D2002- ANEGALLA THIRUPATHI**

## Photography Corner – Structures Around Us


**Best Photograph by 227Y1A0104-MUSKU GANESH REDDY**

## The Journey of a BTech Civil Engineering Student

The life of a BTech Civil Engineering student is filled with challenges, learning experiences, and determination. From classroom learning to laboratory experiments, surveys, site visits, assignments, and project works, every day brings new opportunities to grow and develop technical knowledge.

Civil engineering students often balance theoretical concepts with practical exposure in the field. Whether it is working on surveying instruments under the sun, preparing structural drawings, conducting experiments in laboratories, or understanding construction practices during field visits, the journey demands patience, discipline, and hard work.

Apart from academics, students also face pressure related to project deadlines, skill development, placements, and career opportunities. However, these struggles shape them into confident, responsible, and technically skilled professionals ready to contribute to society.

Civil Engineering is not just about constructing buildings and roads; it is about creating infrastructure that supports human life and national development. Every bridge, highway, dam, and smart city reflects the dedication and efforts of civil engineers.

Though the path may be challenging, the journey of a civil engineering student is inspiring, meaningful, and filled with opportunities to build a better future for society.

**217Y1A0121-GUTTULA SINDHU DEVI**

# STUDENTS CORNER

**Ideas* Imagination*Innovation**

A Glimpse of thoughts Creativity and technical prospectives from the students of Department of Civil Engineering

## PRODUCT DEVELOPMENT

Pervious concrete blocks are an innovative and eco-friendly construction material designed to allow water to pass through their interconnected voids. Unlike conventional concrete, pervious concrete contains little or no fine aggregates, creating a porous structure that improves groundwater recharge and reduces surface runoff.

These blocks are widely used in pavements, parking areas, walkways, footpaths, and low-traffic roads to promote sustainable drainage systems and environmentally friendly infrastructure development. Pervious concrete helps minimize waterlogging, controls urban flooding, and supports rainwater harvesting by allowing rainwater to infiltrate into the soil naturally.

Recent research in civil engineering focuses on improving the strength and durability of pervious concrete by incorporating supplementary materials such as fly ash, silica fume, metakaolin, fibers, and recycled aggregates. These materials enhance mechanical properties while maintaining permeability and sustainability.

Pervious concrete blocks also contribute to reducing the urban heat island effect, improving water quality through filtration, and supporting green construction practices. Due to their environmental benefits and sustainable performance, pervious concrete blocks are becoming an important component in modern smart city and sustainable infrastructure projects.

## ACADEMIC TOPPERS

**TIPPANI UDAY KUMAR:227Y1D2007**
**CGPA:9.01**

"M.Tech in Structural Engineering provided us with advanced technical knowledge, research exposure, and practical problem-solving skills. The support from faculty, research-oriented learning environment, and industry-focused training helped us strengthen our analytical and professional abilities. We are grateful to the department for motivating us toward academic and research excellence."

**NAMSANI SAI DEEKSHITH:217Y5A0106**
**CGPA:9.54**

"Success in Civil Engineering comes through continuous learning, practical understanding, and dedication. Consistent efforts, time management, and active participation in laboratories, projects, and technical activities helped us achieve academic excellence. We thank our faculty members and the department for their constant guidance and encouragement throughout our journey."

# CONCRETE MINDS

**STUDENT CLUB ACTIVITIES**

Building Ideas • Shaping Structures • Inspiring Innovation.

## FROM CONCEPT TO CREATION


The **Department of Civil Engineering** at Marri Laxman Reddy Institute of Technology and Management successfully organized a **Model Making Event** on **February 22, 2025**. The event aimed to encourage students to explore innovative ideas, enhance practical knowledge, and develop technical creativity through model-based learning.

Students enthusiastically participated by presenting a variety of working and conceptual models related to civil engineering applications and sustainable infrastructure concepts. The event provided an excellent platform for students to demonstrate their technical skills, teamwork, problem-solving abilities, and innovative thinking. Faculty members appreciated the participants for their creativity, presentation skills, and engineering approach.

## ACHIEVEMENT SPOTLIGHT

MALLA REDDY(MR)
DEEMED TO BE UNIVERSITY

CERTIFICATE
OF APPRECIATION
THIS CERTIFICATE IS PRESENTED TO
N.YOGA NANDHINI
2ND PRIZE MODELLING MARATHON

In appreciation of her exceptional participation in Modelling Marathon Competition in Civil Engineering Conclave, as part of One day State level civil conclave techno fest, which have greatly enhanced the values of Malla Reddy Deemed to be University on March 12, 2025.

HOD CONVENER

Ms. Nandini (247Y5A0123) of the Department of Civil Engineering secured 2nd Prize in the Modelling Marathon organized by Malla Reddy University on March 12, 2025. She showcased excellent creativity, innovation, and technical skills during the competition. The department congratulates her on this remarkable achievement and wishes her continued success in future endeavors.

## STUDENT CERTIFICATIONS & SKILL DEVELOPMENT

Skill India
N·S·D·C

CERTIFICATE of PARTICIPATION

This is to certify that
B Pandu Rangadu
has successfully participated in the online skilling course on
Jal Vitaran Sanchaalak
a course offered by Water Management & Plumbing Skill Council through Skill India Digital Hub.

Course completed on Mar 09, 2025 | 40 Hours 00 Minutes

Water Management & Plumbing Skill Council
Validity authorized by Skill India Digital Hub
Ashish Agarwal
Chairman, WMPSC

राष्ट्रीय लघु उद्योग निगम–तकनीकी सेवा केन्द्र
THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.
TECHNICAL SERVICES CENTRE

S.No. 221602 Date: 13/02/2025

This is to certify that Mr. / Ms. Srinivasa Reddy Vempada
Son/Daughter of Mr. V A N Reddy
has successfully completed training in the course of
Two weeks Industrial Training Program On Primavera
from 27/01/2025 to 10/02/2025 and secured A1
grade during performance evaluation.
During the above period, the trainee's conduct was found Good

Head of Training
Head of Centre

Certificate of Participation

# CONCRETE MINDS

**STUDENT CLUB ACTIVITIES**

Building Ideas • Shaping Structures • Inspiring Innovation.

## COMMUNITY OUTREACH PROGRAMS

The Department of Civil Engineering at Marri Laxman Reddy Institute of Technology and Management actively organized and participated in various social awareness programs, health campaigns, environmental initiatives, and community outreach activities during the academic year 2025. These programs aimed to promote social responsibility, health awareness, environmental consciousness, and community engagement among students.

On 26-06-2025, students participated in the International Day Against Drug Abuse and Illicit Trafficking at Shilpakala Vedika to spread awareness about the harmful effects of drug abuse and encourage a healthy lifestyle among youth.

A Vanamahotsavam Plantation Drive was conducted on 17-06-2025 at the MLRITM campus, where students and faculty members actively participated in tree plantation activities to promote environmental sustainability and green initiatives.

The department also organized the Anti-Drug Soldier Campaign – Operation Sankalp on 13-06-2025 at AROHA AV Center to educate students about drug prevention and the importance of a disciplined and healthy life.

A Breast Cancer Awareness Program was conducted on 06-06-2025 at Pragya Auditorium to create awareness regarding early detection, prevention, and women's health care. Experts highlighted the importance of regular health check-ups and healthy lifestyle practices.


Students enthusiastically celebrated Telangana Formation Day on 02-06-2025, showcasing cultural pride and respect for the history and heritage of Telangana.

On 07-03-2025, a Blood Donation Camp was organized in association with CARE Hospitals at CARE Hospitals Banjara Hills. Students and faculty members actively donated blood, contributing to a noble social cause.

The department celebrated the Birth Anniversary of Warrior Queen Lokamata Devi Ahilyabai Holkar on 08-03-2025, remembering her contributions to society, leadership, and women empowerment.

A Workshop on Yoga was conducted on 06-03-2025 at Pragya Auditorium to promote physical fitness, mental wellness, and stress management among students.

Further, an Anti-Drug Awareness Campaign on 28-01-2025, FIT India Week 2025 on 25-01-2025, and a Safe Drive Programme on 08-01-2025 were organized to encourage fitness, safety awareness, and responsible citizenship among students.

These activities reflect the department's commitment toward holistic student development, social responsibility, health awareness, and community welfare.

# CAMPUS CHRONICLES

**events, experiences, and excellence**

Where campus stories come alive
through achievements and activities

**Valorous – National Technical Fest 2025**


The Department of Civil Engineering at Marri Laxman Reddy Institute of Technology and Management successfully organized **"Valorous"**, a vibrant technical fest that provided students with a platform to showcase their technical, creative, and innovative skills. Various technical competitions, poster presentations, model displays, and interactive activities were conducted with enthusiastic participation from students. The event encouraged teamwork, problem-solving abilities, and technical excellence among budding engineers.

**Alumni Meet – Dallas 2025**

The alumni network of Marri Laxman Reddy Institute of Technology and Management organized the **Alumni Meet – Dallas 2025** on **March 8, 2025**, bringing together alumni members, faculty, and distinguished guests. The event strengthened the bond between alumni and the institution while providing opportunities for networking, professional interaction, and sharing of experiences. The gathering reflected the strong global presence and achievements of MLRITM alumni across various professional domains.


**Traditional Day Celebrations-2025**


The students and faculty of the Department of Civil Engineering enthusiastically celebrated **Traditional Day**, showcasing the rich cultural heritage and traditions of India. Students participated in the celebrations wearing colorful traditional attire and engaged in cultural activities with great enthusiasm. The event promoted cultural values, unity, and joyful interaction among students and faculty members, creating a vibrant and memorable atmosphere on the campus.

**Sports Fest-2025**

Students of the Department of Civil Engineering actively participated in the **Sports Fest**, demonstrating excellent sportsmanship, teamwork, and competitive spirit. Various outdoor and indoor sports events were organized, encouraging students to maintain physical fitness and leadership qualities alongside academics. The department appreciated the winners and participants for their dedication, enthusiasm, and outstanding performances during the sports competitions.

# FACULTY CORNER

**Guiding Minds* Inspiring Future Engineers**

Mentoring, Motivating and Empowering

Our faculty members specialize in diverse domains of Civil Engineering and actively contribute to teaching, research, consultancy, industry projects and professional development. They participate in conferences, workshops, FDPs and publish research in reputed journals to keep students updated with emerging technologies and industry trends.

### Student Mentoring

Faculty mentors guide students in academics, career planning, higher education, internships, placements and overall personality development through regular mentoring sessions.

### Student Counselling & Support

Continuous counselling support is provided to help students manage academic stress, personal challenges and career-related concerns. We promote a positive learning environment and holistic well-being.

### Academic Guidance

Faculty members conduct remedial classes, technical discussions and interactive learning sessions to strengthen conceptual understanding and improve academic performance.

### Project Guidance & Innovation

We guide students in mini projects, major projects, research activities, technical paper presentations and innovation-based competitions to enhance creativity and problem-solving skills.

### Career & Higher Education Support

Students receive guidance for placements, competitive examinations, higher education, entrepreneurship and skill development through expert interactions, workshops and training programmes.

### Industry Interaction & Exposure

Industrial visits, expert talks, workshops and consultancy projects help students gain practical exposure and understand real-world challenges in civil engineering.


**Academic Outreach by MLRITM Faculty at MLRIT**

A guest lecture on **"Human Values, Ethics and Harmony for a Sustainable Society"** was delivered by **Ms. B. Lavanya, Assistant Professor, MLRITM**, to the students of Marri Laxman Reddy Institute of Technology on **23 April 2025**.


**DSS Video Lectures**

# DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers

## Industry/Field Visits

The Department of Civil Engineering at Marri Laxman Reddy Institute of Technology and Management organized various industry and field visits to provide students with practical exposure and real-time understanding of civil engineering practices.

An industrial visit on **"Cement Manufacturing and Quality Estimation"** was organized at Sagar Cements Pvt. Ltd. on **20-01-2025** under the guidance of **Dr. K. Murali**. Students gained knowledge about cement manufacturing processes, quality control techniques, and industrial safety practices followed in cement industries.


A field visit to the **construction of a CC Road using Abrasion Powder** was conducted at **Kompally, Hyderabad** on **07-01-2025** under the supervision of **J. Seetunya**. The visit helped students understand modern road construction techniques, material usage, and sustainable construction practices.

Another technical field visit on **"Preparation of Bar Bending Schedule for Slabs"** was organized at **Arundathi Medical College, Hyderabad** under the guidance of **D. M. Saravanan**. Students learned practical aspects of reinforcement detailing, estimation, and preparation of bar bending schedules used in structural construction works.

These visits provided valuable industrial exposure and helped students connect theoretical concepts with practical applications in the field of civil engineering.

# DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers

## GUEST LECTURES/WORKSHOPS

The Department of Civil Engineering at Marri Laxman Reddy Institute of Technology and Management organized several technical events and expert sessions to enhance students' practical knowledge and exposure to emerging trends in structural engineering and construction technology.

A **Workshop on Smart Structures and Structural Health Monitoring (SHM) using IoT and AI** was conducted from **30-01-2025 to 31-01-2025** by **Mr. Ravi Babu** from Bhagya Sree Engineering Services. The workshop provided students with insights into modern smart monitoring systems, sensor technologies, and the application of Artificial Intelligence in structural assessment and maintenance.

The department also organized a **Training Program on Performance-Based Seismic Design (PBSD) and Retrofitting Techniques** from **01-02-2025 to 04-02-2025** by **Mr. M. Jaganaiah** from Giridhari Homes. The program focused on seismic-resistant structural design, retrofitting methods, and safety measures adopted in earthquake-prone regions. Students gained practical exposure to advanced structural design approaches and retrofitting concepts.

Further, a **Guest Lecture on Innovations in Long-Span and Cable-Stayed Bridge Design** was conducted on **14-03-2025** by **Mr. Manku Venkat**, GHMC Licensed Engineer and Consultant. The session highlighted recent innovations, modern construction practices, and design considerations involved in long-span and cable-stayed bridge structures.


An **Interaction Session on "Opportunities of Civil Engineering in the United States"** wa s organized on **02-01-2025** by **Prof. Jejal-Reddy Bathi, P.E., Environmental Engineering Coordinator, University of Tennessee at Chattanooga (UTC)**. The session provided students with valuable insights into higher education opportunities, research prospects, career pathways, and professional practices in the United States civil engineering sector.

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# DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers

## RESEARCH AND CONSULTANCY

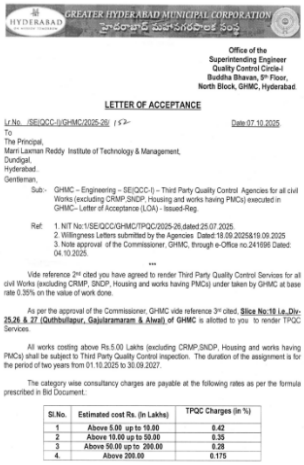
### "Engineering Expertise Supporting Quality Urban Infrastructure"

The Department of Civil Engineering is actively involved in **GHMC Third Party Quality Control (TPQC) Consultancy Works**, contributing towards the improvement and monitoring of urban infrastructure quality.

As part of the consultancy services, faculty members and technical experts from the department conduct **field inspections of road construction works** undertaken by the Greater Hyderabad Municipal Corporation (GHMC). The inspections focus on evaluating construction quality, material standards, workmanship, and compliance with approved engineering specifications.

During the quality assessment process, the team performs detailed site verification and technical evaluation to ensure that the road works meet safety and durability standards. Based on the inspections and observations, comprehensive technical reports are prepared and submitted to GHMC.

This consultancy activity provides practical exposure to modern quality control practices and reflects the department's commitment to professional expertise, industry collaboration, and societal development through engineering services.



GREATER HYDERABAD MUNICIPAL CORPORATION

Office of the Superintending Engineer Quality Control Circle-I Buddha Bhavan, 9th Floor, North Block, GHMC, Hyderabad

**LETTER OF ACCEPTANCE**

Lr.No. /SE/QCC-I/GHMC/2025-26/ 152 Date:07.10.2025

To
The Principal,
Marri Laxman Reddy Institute of Technology & Management,
Dundigal,
Hyderabad.

Gentleman,

Sub:- GHMC – Engineering – SE/QCC-I) – Third Party Quality Control Agencies for all civil Works (excluding CRMP,SNDP, Housing and works having PMCs) executed in GHMC– Letter of Acceptance (LOA) - Issued-Reg.

Ref: 1. NIT No:1/SE/QCC/GHMC/TPQC/2025-26,dated:25.07.2025.
2. Willingness Letters submitted by the Agencies Dated:18.09.2025&19.09.2025
3. Note approval of the Commissioner, GHMC, through e-Office no.241696 Dated: 04.10.2025.

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Vide reference 2nd cited you have agreed to render Third Party Quality Control Services for all civil Works (excluding CRMP, SNDP, Housing and works having PMCs) under taken by GHMC at base rate 0.35% on the value of work done.

As per the approval of the Commissioner, GHMC vide reference 3rd cited, **Slice No:10 i.e.,Div-25,26 & 27 (Quthbullapur, Gajularamaram & Alwal) of GHMC** is allotted to you to render TPQC Services.

All works costing above Rs.5.00 Lakhs (excluding CRMP,SNDP, Housing and works having PMCs) shall be subject to Third Party Quality Control inspection. The duration of the assignment is for the period of two years from 01.10.2025 to 30.09.2027.

The category wise consultancy charges are payable at the following rates as per the formula prescribed in Bid Document:

| Sl.No. | Estimated cost Rs. (In Lakhs) | TPQC Charges (in %) |
|---|---|---|
| 1 | Above 5.00 up to 10.00 | 0.42 |
| 2 | Above 10.00 up to 50.00 | 0.35 |
| 3 | Above 50.00 up to 200.00 | 0.28 |
| 4. | Above 200.00 | 0.175 |

## Patents published

| Application Number | Applicant Name | Title of Invention |
|---|---|---|
| **202141037136A** | Dr. R Gopi | Monitoring of the corrosion potential of the reinforcement of the examined beams |
| **202541040082** | Mrs. Busaraju Lavanya | Real-Time Traffic Flow Monitoring Using Drones and Aerial Sensors |
| **202541088157 A** | Dr. V Varalakshmi | Method of Synthesis of $SnO_2$ Nano catalyst using Leaf Extract of Delonix regia |
| **202541032671 A** | Dr. V Varalakshmi | Preparation Of Hallow Bricks Using Waste Plastic |
| **202541043427 A** | Dr. V Varalakshmi | IOT Based Water Quality Monitoring System Using Arduino |
| **202541009831 A** | Mrs. Telukuntla Neha | Fiber Optic Sensors For Early Detection Of Cracks In Concrete Structures |
| **202541009819 A** | Dr. V Varalakshmi | Noise Pollution Control in Urban Areas Using Green Barriers |

## Papers published

1. **Maheshuni Akshaykumar (237Y1D2001)**
   *Experimental Study on the Mechanical and Durability Properties of Concrete Containing Rice Husk Ash as Partial Cement Replacement* – **Innovations**
2. **Banothu Anil (237Y1D2002)**
   *An Investigation into the Behaviour of Concrete Incorporating Waste Glass and Sugarcane Bagasse Ash* – **Taylor & Francis Group**
3. **Gaini Anusha (237Y1D2003)**
   *Comparative Analysis of Behavior of Horizontal and Vertical Irregular Building with and Without Using Shear Walls by ETABS Software* – **Construction Materials and Structures Proceedings**
4. **Ponguvala Dinesh (237Y1D2004)**
   *Comparative Study of Different Retrofitting Methods on High Rise Building* – **Innovations**
5. **Karne Karishma (237Y1D2005)**
   *Mechanical Properties and Sulphate Tolerance of Silica Fume and Metakaolin-Based Self-Compacting Concrete* – **Taylor & Francis Group**
6. **Gummadi Nuthana (237Y1D2006)**
   *Development of Concrete Reinforced with Plastic Using High-Density Polyethylene Terephthalate Waste as Aggregate Replacements* – **Taylor & Francis Group**
7. **Chette Raju (237Y1D2007)**
   *Comparison of Seismic Performance of Buildings with Bracing and Shear Wall Systems Using ETABS Software* – **Innovations**
8. **Palada Santhoshisri (237Y1D2011)**
   *The Weight Optimization of Pre-Engineered Buildings with Tweaks in Bay Spacing* – **Construction Materials and Structures Proceedings**
9. **Batti Sai Krishna Goud (237Y1D2009)**
   *Experimental Study on the Bending Strength of Beams Reinforced with CFRP* – **Taylor & Francis Group**
10. **Bashetty Sandeep (237Y1D2010)**
    *Experimental Study on Replacement of Natural Sand by Lateritic Sand with Addition of Coconut Fiber in Concrete* – **Innovations**
11. **C Ravi Shankar (237Y1D2012)**
    *Strength Improvement Techniques on Pervious Concrete* – **Taylor & Francis Group**
12. **C Ravi Shankar (237Y1D2012)**
    *Experimental Study on Strength Improvement Methods for Pervious Concrete* – **Innovations**
13. **Pallepu Shruthi (237Y1D2013)**
    *An Experimental Study of the Mechanical Properties of Concrete Paver Blocks Using Red Soil as Partial Fine Aggregate Substitute and Metakaolin as Partial Cement Replacement* – **Taylor & Francis Group**
14. **Pagidipalli Venkatesh (237Y1D2014)**
    *Response Spectrum Analysis with Regular and Irregular Structures with Diagrid Systems* – **Innovations**
15. **Byraju Aravind Sai (237Y1D2015)**
    *Effect of Rice Straw Ash and Micro Silica on Strength and Durability of Concrete* – **Construction Materials and Structures Proceedings**

# DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers

## INDUSTRY CONNECT

he Department of Civil Engineering at Marri Laxman Reddy Institute of Technology and Management has actively strengthened industry and academic collaborations through Memorandums of Understanding (MOUs) with reputed organizations and institutions. These collaborations aim to enhance practical learning, research exposure, innovation, and industry readiness among students and faculty members.

An MOU was signed with ALEAP WE Hub on 03-01-2025 to promote innovation and entrepreneurship activities. The collaboration focuses on incubation facilities, conduct of Ideathons and Hackathons, support for research activities, and encouragement of student innovation and startup culture.

The department also established academic collaboration with SR University on 16-04-2025 for faculty exchange programs, joint research and publications, research scholar allotment, and resource sharing. This partnership encourages collaborative research and academic excellence.

On 15-03-2025, MLRITM became a nodal centre for Virtual Labs, providing students access to virtual experimentation and simulation-based learning platforms that strengthen conceptual and practical understanding.

Further, an MOU was signed with High Spectra Technologies on 11-01-2025 for establishing an industry-supported laboratory, internships, placement support, and skill development training programs. The collaboration helps bridge the gap between academia and industry by providing students with real-time technical exposure and career opportunities.

These initiatives reflect the department's commitment to fostering strong industry-academia interaction and creating a dynamic learning ecosystem for future civil engineers.

# DEPARTMENT ACTIVITIES

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## infrastructure

### *Driving Innovation, Sustainability, and Advanced Learning*

The Department of Civil Engineering has established specialized Centres of Excellence to promote research, innovation, industry interaction, and experiential learning in emerging areas of civil engineering.

### *Centre for Smart Design and Structural Systems*

he Centre for Smart Design and Structural Systems, supported by High Spectra Technologies, serves as a platform for promoting innovation and advanced learning in structural engineering and smart construction practices. The center provides students with exposure to modern design tools, BIM applications, digital construction technologies, and industry-oriented training to enhance their technical skills and practical knowledge in emerging areas of civil engineering.


### *Centre of Excellence for Sustainable Construction Practices and Materials*


The Centre focuses on sustainable infrastructure development through the study of eco-friendly materials, green building technologies, waste utilization, and modern construction practices. It encourages students to explore innovative and environmentally responsible engineering solutions through research, workshops, consultancy, and industry collaboration.the activities supported Ultratech Cement.

These Centres of Excellence strengthen practical learning and prepare students to meet future challenges in the construction and infrastructure industry.

# DEPARTMENT ACTIVITIES

**events, experiences, and excellence**

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## GALLERY

# PLACEMENTS

EMPOWERING THROUGH INNOVATIONS
MLRS

## YOUR CAREER. OUR COMMITMENT.

The Department of Civil Engineering strives to provide excellent career opportunities to our students. Our strong industry connect, quality education, and continuous training ensure overall development and successful careers.

## OUR TOP RECRUITERS

BECC
BHARAT ENGINEERING
CONSTRUCTION COMPANY PRIVATE LIMITED

GAYATRI
GAYATRI PROJECTS LIMITED

KSV
CONSTRUCTIONS
SINCE 1948

GARUDA
INFRA & DEVELOPERS
*Growing Relentlessly Ahead*

RAMK
GROUP

wipro

Bollineni
HOMES from
BOLLINENI DEVELOPERS

tcs
TATA
CONSULTANCY
SERVICES

SHRIRAM
HOUSING FINANCE
FINDING WAYS TO FUNDING HOMES

CONSOLIDATED
CONSTRUCTION
CONSORTIUM LTD

APC

accenture

RDC Concrete
We Promise We Deliver

virtusa

Tech
Mahindra

Capgemini

tp technopaints

**STRONG INDUSTRY CONNECT**
Building relationships with leading companies across core sectors.

**EXCELLENT PLACEMENT SUPPORT**
Training, internships, soft skills, aptitude programs and placement preparation for career success.

**BRIGHT CAREER OPPORTUNITIES**
Diverse job roles in reputed organizations with attractive packages and growth.

**WE BUILD ENGINEERS. WE BUILD FUTURES.**
*Strong Foundation. Bright Careers.*