



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



DECEMBER 2025 EDITION



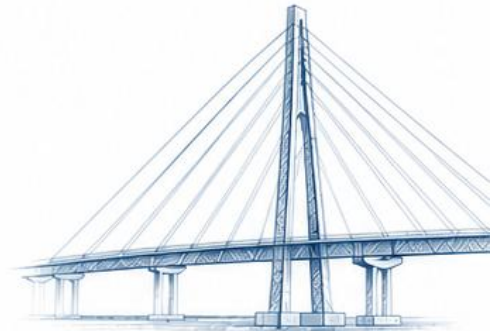
VOLUME 2

BUILDING IDEAS. SHAPING TOMORROW.



DEPARTMENT OF CIVIL ENGINEERING

Learn | Innovate | Build | Sustain



SUSTAINABLE
FUTURE



SMART DESIGN
SOLUTIONS



STRONGER
INFRASTRUCTURE



BETTER
TOMORROW

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

| Faculty Editorial Team | |
|-------------------------|------------------------|
| Ms Jogi Seetunya | Asst. Professor |
| 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



Ms Anu Shreya Reddy
Secretary, MLRITM



Dr. P Sridhar
Director, MLRITM



Dr. K Murali
HoD-CE, 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.

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.

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.

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 Analyze, design, build, maintain, or improve civil engineering-based systems, considering environmental, economic, and societal requirements. |
| PEO2 | Multidisciplinary Approach 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 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 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, computing, 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 sustainable 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, culture, society and environment as required (WK5) |
| PO4 | Conduct investigations of complex problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, 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 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 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 Team work: Function effectively as an individual, and as a member or leader in diverse/multidisciplinary teams. |
| PO9 | Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, 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 environments. |
| PO11 | Life-Long Learning: Recognize the need for and have the preparation and ability for 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. A Rakesh

**M.Tech Structural Engineering
2022-24 Batch**



Roll No:
227Y1D2002
Company:
Zone-03
Entrepreneur
Designation:
Licensed Surveyor

“My journey at MLRITM in the Department of Civil Engineering helped me strengthen my technical knowledge and practical skills in structural engineering and surveying. The guidance from faculty members, project-based learning, and industry exposure motivated me to explore entrepreneurship. I am grateful to the department for shaping my confidence and professional growth.”

Mr. Golusula Venkatesh

**M.Tech Structural Engineering
2021-23 Batch**



Roll No:
217Y1D2014
Company:
Municipal Department
Gov of Telangana
Designation:
Municipal Assistant Manager

“The M.Tech Structural Engineering program at MLRITM provided me with strong analytical and problem-solving abilities. The support from faculty, research-oriented learning, and technical training helped me secure a responsible position in the Government sector. I sincerely thank the Department of Civil Engineering, MLRITM for encouraging me throughout my academic journey.”

Mr. P Vivek

**M.Tech Structural Engineering
2023-25 Batch**



Roll No:
237Y1D2001
Company:
Designtree services
consultant Pvt Ltd.
Designation:
Jr. CAD Engineer

“My experience at MLRITM was truly enriching and career-oriented. The Department of Civil Engineering enhanced my technical and software skills through practical sessions, seminars, and project work. The continuous encouragement from faculty members helped me gain confidence and prepare for the professional world successfully.”

Mr. Rakesh Badhavath

**B.Tech Civil Engineering
2014-18 Batch**



Roll No:
147Y1A0168
Company:
Sunro Pvt Ltd,
London
Designation:
Lead Operations

“MLRITM provided me with a strong technical foundation and the confidence to excel in the industry. The continuous support from faculty members and practical learning opportunities helped shape my professional journey.”

Mr.K Bhanu Prasad

**B.Tech Civil Engineering
2018-22 Batch**



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

“The Civil Engineering Department at MLRITM encouraged innovation, teamwork, and practical problem-solving skills. The knowledge and guidance received from the faculty played a key role in my career development.”

Ms S.M.Janani

**B.Tech Civil Engineering
2015-19 Batch**



Roll No:
167Y5A0105
Company:
BIMAX Engineering,
Dubai
Designation:
BIM Coordinator

“My journey at MLRITM was filled with valuable learning experiences and memorable moments. The department’s focus on industry-oriented training and technical skills helped me build a successful career in BIM and structural engineering.”



VIEWS OF PLACED STUDENTS

Campus Dreams to career success

Transforming academic aspirations into successful professional careers



“A Proud Milestone”

Getting placed was one of the most memorable achievements of my academic journey at MLRITM. The constant support from faculty, placement training sessions, and technical guidance helped me improve my confidence and skills. The institution provided a strong platform to face interviews successfully and step into the professional world.
237Y1D2008-Raju Rodda- Qess Corp Limited



“Dreams Turned into Reality”

Being placed in a reputed company is a dream come true for me. MLRITM provided excellent opportunities to learn, explore, and grow professionally. The encouragement from teachers and friends motivated me to perform better and achieve my goals.
247Y1D2001-Shylesh Akula-NIRMAN ENGINEERS

“From Classroom to Career”

The learning environment at MLRITM encouraged me to develop both technical and communication skills. Workshops, projects, internships, and mock interviews played an important role in preparing me for campus placements. I am grateful to the department and mentors for their continuous encouragement throughout the journey.
237Y5A0111- P. Nisse Priya- INTELLICRATS INFO SOLUTIONS



“A Journey of Growth”

My placement experience taught me the importance of dedication, consistency, and teamwork. The training programs conducted by the college enhanced my aptitude, coding, and problem-solving abilities. I sincerely thank the faculty and placement cell for guiding me toward a successful career path.
237Y5A0111-H Ugendar Rao-INTELLICRATS INFO SOLUTIONS

“Message to Juniors”

Stay focused, improve your communication skills, and participate actively in technical events and projects. Make use of every opportunity provided by the college. Consistent effort and confidence will definitely lead you toward success.
237Y5A0102-K. Gnanadeepika-INTELLICRATS INFO SOLUTIONS





STUDENTS CORNER

Ideas* Imagination*Innovation

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



POEM

Civil Engineers – Builders of Tomorrow

With strength of mind and dreams so wide,
Civil engineers stand with pride.
They shape the roads on which we go,
And raise the bridges strong below.
They plan the dams that store the rain,
To serve the towns and fertile plain.
Through water lines and drainage flow,
They help the seeds of progress grow.

From towering buildings to tunnels deep,
Their silent promises they keep.
With maps and models in their hand,
They build the future of the land.

They test the soil, they study steel,
Transforming thoughts to structures real.
With skill and vision, day by day,
They pave the nation's brighter way.

For every city standing tall,
A civil engineer shaped it all.
Through hard work, science, art, and care,
They build a better world to share.

247Y1D2007-JALLA KOUSHIK

Advanced Perovskite Solar Cells – A Step Towards Sustainable Energy

Renewable energy has become one of the most important solutions for meeting future energy demands and reducing environmental pollution. Among various renewable energy technologies, perovskite solar cells are gaining attention because of their high efficiency, low cost, and simple manufacturing process. Recent research studies have shown significant improvements in the performance of these solar cells through advanced simulation and optimization techniques.

Perovskite solar cells use materials such as methyl ammonium lead iodide ($\text{CH}_3\text{NH}_3\text{PbI}_3$), which possess excellent light absorption and energy conversion properties. Researchers have investigated the influence of defect densities in these solar cells and found that reducing defects can greatly improve efficiency and stability. Through SCAPS-1D simulation studies, the efficiency of the solar cell was enhanced from 13.1% to 17.23%, showing the potential of advanced material optimization.

The study also proposed a simpler hole transport layer-free solar cell structure that achieved an efficiency of around 15.23%. Such simplified structures can reduce manufacturing complexity and cost, making solar technology more accessible and sustainable for future applications.

This research highlights the importance of innovative technologies in sustainable energy development. As future engineers, students must explore renewable energy systems and support eco-friendly solutions that contribute to a greener and more energy-efficient world.

247Y1D2011-MALLEKEDI ASHWITHA

Best Poster Presentation During Engineers

Building Sustainable Solutions for Tomorrow



Best Poster by 237Y1A0104-R CHANDRA HAS

ENGINEERS WHO BUILT THE NATION

Sir M. Visvesvaraya
Achievement: Krishna Raja Sagara (KRS) Dam
Known as the "Father of Modern Engineering in India," he introduced advanced irrigation and flood control systems. Engineers' Day is celebrated on his birthday, 15th September.

E. Sreedharan: Delhi Metro & Konkan Railway
Called the "Metro Man of India," he transformed India's transportation system through world-class railway and metro projects.

Gustave Eiffel: Eiffel Tower
He designed the iconic Eiffel Tower, a masterpiece of structural engineering and global innovation.

John Augustus Roebling: Brooklyn Bridge
He created the historic Brooklyn Bridge, known for its advanced suspension bridge design.

William F. Baker: Burj Khalifa
He contributed to the structural design of the Burj Khalifa, the tallest building in the world.

Emily Warren Roebling: Brooklyn Bridge Completion
She played a major role in completing the Brooklyn Bridge and became a symbol of engineering dedication and leadership.

247Y1A0107-GURUJALA BHAVANI



CONCRETE MINDS

STUDENT CLUB ACTIVITIES

Building Ideas • Shaping Structures • Inspiring Innovation



FROM CONCEPT TO CREATION

Civil Engineering student club CONCRETE MINDS organized a Model Exhibition to encourage innovation, creativity, and technical knowledge among students. The exhibition provided a platform for students to present working and conceptual models related to modern civil engineering practices and sustainable infrastructure development.



Students actively participated by showcasing models on smart cities, bridge engineering, green buildings, water resource management, transportation systems, earthquake-resistant structures, and environmental sustainability. The exhibition reflected the technical skills, teamwork, and innovative thinking of budding civil engineers.

STUDENT CERTIFICATIONS & SKILL DEVELOPMENT



Every laboratory becomes more meaningful when learning is supported with professional certification and practical skill development



CONCRETE MINDS

STUDENT CLUB ACTIVITIES

Building Ideas • Shaping Structures • Inspiring Innovation



COMMUNITY OUTREACH PROGRAMS

Engineering for Society • Sustainability • Service



drives, health pledge programs, and community service activities aimed at creating positive social impact.

Programs such as SDG Walk, Anti-Drug Awareness Campaigns encourage youth to lead healthy and disciplined lives, while Van Mahotsav



contribute towards building a socially responsible and sustainable society.

MLRITM actively conducts Community Outreach Programs to promote social responsibility, environmental awareness, and public health among students and society. Through NSS and various institutional initiatives, students participate in awareness campaigns, plantation



activities promote environmental sustainability through tree plantation and conservation initiatives. Health awareness programs, including Cancer Prevention Pledge activities, educate participants about preventive healthcare practices and Bringing Smiles to Cancer-Stricken Children through Art and Compassion.

These outreach programs provide students with opportunities to interact with communities, develop leadership qualities, and





CAMPUS CHRONICLES

events, experiences, and excellence

Where campus stories come alive through achievements and activities



A Celebration of Talent, Sportsmanship, and Innovation



MLRITM organizes various campus events throughout the academic year to encourage academic excellence, cultural values, innovation, leadership, and student engagement. These events provide students and faculty members with opportunities to celebrate achievements, showcase talents, and strengthen teamwork and institutional spirit.

The Department of Civil Engineering enthusiastically participated in the celebration of NBA Tier-I Accreditation, marking a significant milestone in academic quality and institutional excellence. Cultural celebrations such as Bathukamma foster unity, tradition, and cultural awareness among students and staff members.



The institution also promotes innovation and technical



creativity through activities such as Smarth India Hackathon Hosting (8-9 December 2026), where students work collaboratively to develop solutions for real-world problems. Graduation Day celebrations(08 August 2026) recognize the achievements and successful completion of academic programs by graduating students, making the occasion memorable for

students, parents, and faculty members.

These campus events create a vibrant learning environment and contribute to the overall personality development, creativity, leadership qualities, and professional growth of students.





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.



The Department of Civil Engineering at Marri Laxman Reddy Institute of Technology and Management takes pride in the remarkable research contribution of faculty members through publications in reputed Scopus Q1 journals. A notable research article authored by Dr. Kallempudi Murali and international collaborators focused on the green synthesis of iron oxide nanoparticles using spinach agro-waste for sustainable food packaging applications.

The study highlights an innovative approach toward waste valorization by converting agricultural waste into high-performance biodegradable nanocomposite films with enhanced mechanical, thermal, and antimicrobial properties. Published in the prestigious Journal of Thermoplastic Composite Materials, the research contributes significantly to sustainable infrastructure and eco-friendly material development.

This achievement reflects the institution's commitment to advanced research, global collaboration, sustainability, and innovation aligned with modern engineering applications.



Faculty Publication in Scopus Q1 Journal

Showcasing Continuous Learning, Skill Enhancement, and Professional Development Initiatives



DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers



INTERNATIONAL CONNECTION

Strengthening Global Academic Collaboration in Civil Engineering

As part of international academic collaboration and knowledge exchange initiatives, Dr. R. Murali Prasad, Principal of MLRITM, participated in a prestigious **Faculty Exchange Programme** at the University of Tennessee at Chattanooga from **12 December 2025 to 9 January 2026**. The visit aimed to understand advanced teaching–learning methodologies, research practices, laboratory infrastructure, and industry-oriented curriculum design in Civil Engineering education.



During the visit, Dr. Murali Prasad had productive interactions with **Bradley Harris**, Head of the Department, and **Mbakisya A. Onyango**, Director of Civil Engineering, along with other distinguished faculty members. Academic discussions focused on Outcome-Based Education (OBE), sustainable infrastructure development, experiential learning, and opportunities for future research collaboration.



The programme included detailed visits to advanced laboratories such as Structural Engineering, Geotechnical Engineering, Materials Engineering, Durability Testing, Fluid Mechanics, and Surveying Laboratories. Demonstrations on Universal Testing Machines (UTM), pavement testing, RCPT corrosion analysis, GPS and UAV surveying technologies, and hydraulic experiments provided valuable exposure to modern engineering practices and research methodologies.

Dr. Murali Prasad also visited research centers, project buildings, and student innovation facilities where discussions were held regarding collaborative research, faculty interaction, student development programmes, and potential Memorandum of Understanding (MoU) opportunities between both institutions.





DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers



Industry/Field Visits

The Department of Civil Engineering, MLRITM, organized several field visits during the academic year to provide students with practical exposure to real-time engineering applications and industrial practices. These visits helped students bridge the gap between theoretical concepts and field implementation while enhancing their technical understanding and professional skills.



A field visit on “**UAV Applications in Agriculture**” was organized at **Pavmann Viation Pvt. Ltd., Moinabad** on **14/10/2025** under the guidance of **Mr. T. Prasad**. The students gained knowledge about the application of unmanned aerial vehicles in agricultural surveying, monitoring, spraying, and data collection techniques useful for modern

engineering practices.

Another industrial exposure visit on “**Design and Detailing of Walls and RCC Structural Elements**” was conducted at **India Pvt. Ltd., Hyderabad** on **24/11/2025** under the supervision of **Mr. N. Krishna Rao**. Students observed practical detailing techniques, reinforcement arrangements, and modern construction methodologies adopted in RCC structural works.



A field visit to a **culvert construction site** at **D. Pochampally, Hyderabad** was organized on **23/10/2025** under the guidance of **Mr. P. Suresh**. Students studied the stages involved in culvert construction, including foundation preparation, reinforcement placement, concreting, and drainage management systems.

Students also visited the **Construction of Ghat Roads at Srisailam, Andhra Pradesh** on **28/11/2025** under the supervision of **Dr. Murali**. The visit provided practical insights into hill road alignment, slope stabilization, retaining structures, drainage systems, and safety measures adopted in challenging terrains.



A field visit on “**Construction of Recharge Structures**” was conducted at **Vanasthalipuram, Telangana** on

15/12/2025 under the guidance of **Dr. V. Vara Lakshmi**. Students learned about groundwater recharge techniques, rainwater harvesting systems, percolation structures, and sustainable water resource management practices.



DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers



GUEST LECTURES/WORKSHOPS

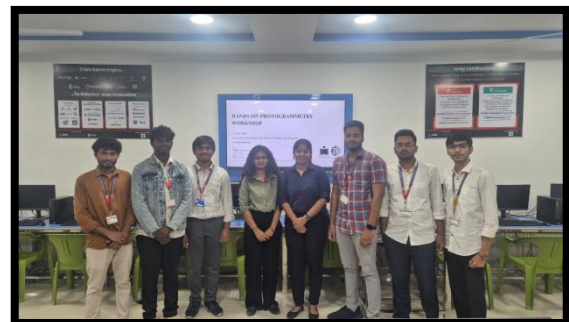
A **One Week Comprehensive Training Program on “BIM Tools for Efficient Structural Design and Project Management”** was conducted from **11-08-2025 to 16-08-2025** by **Mrs. S. Janni, Senior BIM Coordinator, Bimax Engineering, Dubai**. The program focused on Building Information Modelling (BIM), structural coordination, project planning, clash detection, and digital project management techniques used in modern construction industries. Students gained hands-on exposure to advanced BIM tools and collaborative project workflows.



A **Three Days Workshop on “Smart Construction Technologies and Structural Health Monitoring”** was organized from **10-09-2025 to 12-09-2025** by **Mr. Rakesh Badhavath, Lead-Operations Manager, Santro Pvt. Ltd., London**. The workshop highlighted innovative smart construction practices, sensor-based monitoring systems, structural safety assessment methods, and intelligent infrastructure technologies adopted in modern engineering projects.

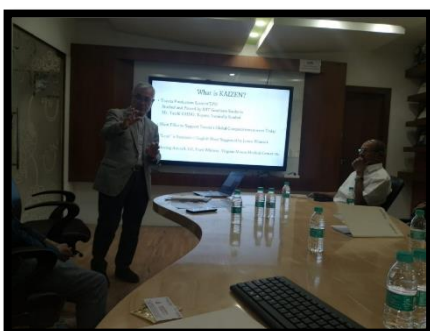
Basic Structures” on **15-09-2025** by **Mrs. D. Jagruthi, Assistant Executive Engineer, Roads and Buildings Department**. The session introduced students to the fundamentals of structural engineering, types of structures, load transfer mechanisms, and practical aspects involved in planning and construction activities.

The department also conducted a **Guest Lecture on “Foundations of Structural Engineering: An Introduction to**



A **One Day Seminar on “Eco-Friendly Materials for Sustainable Construction”** was held on **22-09-2025** by **Dr. Binaya Patnaik, Associate Professor & Head, NICMAR University, Hyderabad**. The seminar emphasized sustainable construction practices, green building materials, environmental considerations, and the importance of reducing carbon footprints in civil engineering projects.

A **One Day Workshop on “Digital Mapping Applications”** was conducted on **22-11-2025** in collaboration with **Pavmann Aviation, Hyderabad**. Students learned about drone-based mapping technologies, GIS applications, aerial surveying, and digital terrain modelling techniques useful for infrastructure planning and monitoring.



Another **One Day Workshop on “Waste Reduction in Construction Sector”** was organized on **01-12-2025** by **Dr. Yoshino Katsusaburo, San Kaizen Consultant, Toyota Production Systems, Japan**. The workshop focused on lean construction practices, waste minimization strategies, productivity enhancement, and sustainable resource utilization in construction projects.

The department further organized a **Two Days Workshop on “Photogrammetry and AR/VR Applications”** from **08-12-2025 to 09-12-2025** by **Dr. Shivaji, Head, Design Department, IIT Hyderabad**. The workshop provided insights into photogrammetry techniques, 3D modelling, augmented reality (AR), virtual reality (VR), and their applications in structural visualization, planning, and smart infrastructure development.



DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers



RESEARCH AND CONSULTANCY

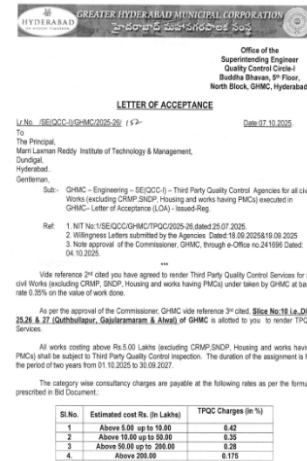
“Engineering Expertise Supporting Quality Urban Infrastructure”

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.



Innovative Student Projects Converted into Scopus Papers

| S. No | Roll No | Student Name | Paper Title | Journal | Vol./Issue & Year |
|-------|------------|------------------------|--|----------------------------|-------------------------------|
| 1 | 237Y1D2001 | Maheshuni Akshaykumar | Experimental Study on the Mechanical and Durability Properties of Concrete Containing Rice Husk Ash as Partial Cement Replacement | Innovations | Issue 89, 2025 |
| 2 | 237Y1D2002 | Banothu Anil | An investigation into the behaviour of concrete incorporating waste glass and sugarcane bagasse ash | Taylor & Francis Group | Volume 1-2025, Pages-129-136. |
| 3 | 237Y1D2003 | Gaini Anusha | Comparative Analysis of Behavior of Horizontal and Vertical Irregular Building with and Without Using Shear Walls by ETABS Software | Construction Materials and | Volume 12, 2025 |
| 4 | 237Y1D2004 | Ponguvala Dinesh | Comparative Study of Different Retrofitting Methods on High Rise Building | Innovations | Issue 89, 2025 |
| 5 | 237Y1D2005 | Karne Karishma | Mechanical properties and sulphate tolerance of silica fume and Metakaolin-based self-compacting concrete. | Taylor & Francis Group | Volume 1-2025, Pages-248-254. |
| 6 | 237Y1D2006 | Gummadi Nuthana | Development of concrete reinforced with plastic using high-density polyethylene terephthalate waste as aggregate replacements. | Taylor & Francis Group | Volume 1-2025, Pages-193-201. |
| 7 | 237Y1D2007 | Chette Raju | Comparison of Seismic Performance of Buildings with Bracing and Shear Wall Systems Using Etabs Software | Innovations | Issue 89, 2025 |
| 8 | 237Y1D2011 | Palada Santhoshisri | The Weight Optimization of Pre-Engineered Buildings with Tweaks in Bay Spacing | Construction Materials and | Volume 12, 2025 |
| 9 | 237Y1D2009 | Batti Sai Krishna Goud | Experimental study on the bending strength of beams reinforced with CFRP | Taylor & Francis Group | Volume 1-2025, Pages-202-207. |
| 10 | 237Y1D2010 | Bashetty Sandeep | Experimental study on replacement of natural sand by lateritic sand with addition of coconut fiber in concrete | Innovations | Issue 89, 2025 |
| 11 | 237Y1D2012 | C Ravi Shankar | Strength Improvement Techniques on Pervious Concrete. | Taylor & Francis Group | Volume 1-2025, Pages-262-267 |
| 12 | 237Y1D2012 | C Ravi Shankar | Experimental Study on Strength Improvement Methods for Pervious Concrete | Innovations | Issue 89, 2025 |
| 13 | 237Y1D2013 | Pallepu Shruthi | An experiment study of the mechanical properties of concrete paver blocks using red soil as partial fine aggregate substitute and metakaolin as a partial cement replacement | Taylor & Francis Group | Volume 1-2025, Pages-231-235 |
| 14 | 237Y1D2014 | Pagidipalli Venkatesh | Response Spectrum Analysis with Regular and Irregular Structures with Diagrid Systems | Innovations | Issue 89, 2025 |
| 15 | 237Y1D2015 | Byraju Aravind Sai | Effect Of Rice Straw Ash and Micro Silica on Strength and Durability of Concrete | Construction Materials and | Volume 12, 2025 |



DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers



INDUSTRY CONNECT

Sagar Cements: 24-10-2025

The collaboration focuses on industrial visits to cement plants and quality laboratories, internships, student projects, and placement opportunities.

Walls & Bridges India Pvt. Ltd.: 19-11-2025

The MoU supports internships, placements, skill development programs, Faculty Development Programs (FDPs), and expert lectures for students and faculty members.

High Spectra Technologies: 11-01-2025

The organization collaborated for the establishment of an industry-supported laboratory, internships, placements, and skill development training programs.



Gayatri Techno Consultants Pvt. Ltd.: 11-10-2025

The collaboration provides opportunities for student internships, live construction projects, and technical training programs for both students and faculty.

ISPACE INFRATECH: 11-08-2025

The company offers internships, live project exposure, and placement opportunities in the construction and interior design sectors.

Pavmann Aviation: 22-11-2025

The MoU focuses on internships, placements, skill development programs, joint research activities, and expert lectures in digital surveying and agricultural drone technologies.

Reezathan Aerial Energy Systems Pvt. Ltd.: 08-10-2025

The collaboration includes internships, placement assistance, joint research, expert talks, and training programs in drone technologies and digital surveying applications.

These collaborations provide students with valuable industrial exposure, practical learning opportunities, and enhanced employability skills aligned with current industry requirements.





DEPARTMENT ACTIVITIES

events, experiences, and excellence

Beyond classrooms—experiences that shape future engineers



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

The 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

Beyond classrooms—experiences that shape future engineers



GALLERY



PLACEMENTS

— 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



BHARAT ENGINEERING
CONSTRUCTION COMPANY PRIVATE LIMITED



GAYATRI
GAYATRI PROJECTS LIMITED



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.