TECHTIMES

2023-2024

Department of Computer Science and Engineering
Marri Laxman Reddy Institute of Technology and Management
Dundigal, Hyderabad – 500 043, Telangana, India.

https://mlritm.ac.in

MARRI LAXMAN REDDY
Institute of Technology and Management

Computer Science and Engineering

2023-2024

ABOUT MLRITM

Marri Laxman Reddy Institute of Technology and Management (MLRITM), Hyderabad was established in 2009, by a devoted group of intellectuals, eminent professionals and industrialists, having a long and outstanding experience in educational field with a mission of spreading quality Education among students.

Ever since its inception, it has transformed itself into a truly premier inter disciplinary technological institute and the college carved a niche for its unique infrastructure with a built-up area of three lakh square feet, having well-ventilated classrooms, state-of-the art laboratories, well maintained outdoor & indoor sports and games facilities.

The faculties are nationally and internationally recognized for its portfolio of high-quality education applied & theoretical research and rigorous analytics that prepare the students for global leadership positions. MLRITM recruits only distinguished academicians, research scientists and experienced faculty who have been carefully chosen from a pool of IITs, NITs, Universities and research organizations.

VISION OF THE INSTITUTE

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

MISSION OF THE INSTITUTE

- To foster a transformative learning environment that empowers students to excel in engineering, innovation, and leadership.
- To produce skilled, ethical, and socially responsible engineers who contribute to sustainable technological advancements and address global challenges.
- To shape future leaders through cutting-edge research, industry collaboration, and community engagement.

Sri MARRI LAXMAN REDDY-CHAIRMAN

Sri Marri Laxman Reddy, the founder Chairman of Marri Educational Group of Institutions has been in the field of education from the last 21 years with the aim of spreading quality education among children at the school & college level. Marri Laxman Reddy Institute of Technology & Management is the culmination of his dreams and was established during year 2009 by **Marri Educational Society**. He is also founder chairman of MLR Institute of technology, MLR Institute of Pharmacy & St. Martin's Engineering College and St. Martin's schools at Balanagar, Chintal and Malkajgiri. He is an athlete of international repute.

Mrs. MARRI MAMATHA REDDY-TREASURER

Mrs. Marri Mamatha Reddy, a person with remarkable abilities and great acumen and a dynamic leader. She is known to be the dynamic mentor of MLR Institute of Technology and Management who is always on the sprit to take the institute to newer levels in every aspect of an "Ideal Institution" and strives hard to make every dream a reality. The treasurer has a vision of establishing MLR Institute of Technology and Management as a brand. She is striving hard to initiate various industry- oriented programs for the benefit of the students and she envisions her students to be present at the top most position in the industry.

Dr. K VENKATESWARA REDDY–PRINCIPAL

Dr. K Venkateshwara Reddy, M. Tech, Ph.D., MISTE, the Principal, Marri Laxman Reddy Institute of Technology & Management, is young & dynamic Professor of CSE. Engineering College and he has achieved an immense exposure in Academic, Research and Administrative spheres at reputed Engineering Colleges. **Research & Guidance**: He has published 32 research papers at National and International Level in the areas of Mathematical modeling and Computing Simulations such as advanced Numerical solutions for Thermos elasticity and in framing the innovative research explorations in Cloud computing, Network security, MANET and there merging fields of computer science.

Dr. B RAVI PRASAD–HOD

The department is headed by Dr. B Ravi Prasad, with teaching experience of 23 years. With his good research experience, guided many students and published research papers in thrust areas. He strives hard to various industry-oriented programs, which enables students to do internships and to get placement in reputed companies. Under his able guidance and dynamic leadership department has achieved zenith of excellence.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

About Department

The department of Computer Science and engineering was established in the year 2010.The department is actively engaged in Research in the areas of Cryptography and Network Security, Data Mining, Wireless Networks, internet of things [IOT] etc. The department has highly qualified, dedicated and efficient teaching faculties and committed administrative staff in all disciplines. Laboratories such as Java Programming, Data Structures, DBMS, OS, Linux, Data warehousing & Data Mining, Case Tools and Web Technologies Labs are well equipped and designed in such a way so as to provide an industrial environment The Department has got projects under various schemes such as DST, RPS etc. Various conferences and workshops were organized related to our field of study under the sponsorship of AICTE, CSI and other reputed organizations. The department coordinates and provides guidance to the students to pursue their studies. The faculty members of our department have published a number of research papers in referred journals like Springer, IEEE, and Elsevier etc.

Vision of the Department

To empower the students to be technologically adept, innovative, self-motivated and responsible global citizen possessing human values and contribute significantly to wards high quality technical education by harmonizing innovation with sustainability.

Mission of the Department

DM1: To offer high-quality education in the computing fields by providing an environment where the knowledge is gained and applied to participate in research, for both students and faculty.

DM2: To develop the problem-solving skills in the students to be ready to deal with cutting edge technologies of the industry.

DM3: To make the students and faculty excel in the professional fields by inculcating the communication skills, leadership skills, team building skills with the organization of various co-curricular and extra-curricular programmers.

DM4: To provide the students with theoretical and applied knowledge, and adopt an education approach that promotes lifelong learning and ethical growth.

M.Tech

Program Outcomes (POs):

PO-1: An ability to independently carry out research /investigation and development work to solve practical problems

PO-2: An ability to write and present a substantial technical report/document

PO-3: Students should be able to demonstrate advanced proficiency in Computer Science and allied emerging areas of Engineering.

PO-4: Students should be able to identify, analyze, and effectively solve complex real-world problems by applying advanced computing concepts, while considering solutions from a global perspective.

PO-5: An ability to acquire and apply advanced technical knowledge, professional skills, and modern computing tools to develop sustainable solutions.

PO-6: An Ability to recognize the significance of lifelong learning and actively pursue continuous professional development by adapting technologies in emerging areas.

Program Educational Objectives (PEOs):

PEO-1:
Graduates will achieve professional excellence and success in the field of Computer Science and Engineering by applying strong technical foundations and problem-solving skills to contribute effectively to industry, academia, and entrepreneurship.

PEO-2:
Graduates will demonstrate a commitment to lifelong learning by continuously enhancing their knowledge and skills through professional development and self-directed learning to effectively adapt to evolving global challenges.

PEO-3:
Graduates of the Computer Science and Engineering program will actively pursue advanced research, contributing to the development of solutions for complex problems and the generation of new knowledge to effectively address real-world challenges.

PEO-4:
Graduates will exhibit professionalism, effective communication, leadership skills, and ethical responsibility while working in multidisciplinary teams to deliver computing solutions that address societal needs and contribute to sustainable development.

B. Tech

Program Outcomes (POs):

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

PO-2: **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems to reach substantiated conclusions using principles of mathematics, natural sciences, and engineering sciences.

PO-3: Design/Development of Solutions: Design solutions for complex engineering problems and develop system components or processes that meet specified needs while considering public health, safety, cultural, societal, and environmental factors.

PO-4: **Conduct Investigations of Complex Problems:** Use research-based knowledge and methods, including experiment design, data analysis, interpretation, and information synthesis, to provide valid conclusions.

PO-5: **Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, for complex engineering activities with an understanding of their limitations.

PO-6: **The Engineer and Society:** Apply contextual knowledge to assess societal, health, safety, legal, and cultural issues and understand the responsibilities relevant to professional engineering practice.

PO-7: **Environment and Sustainability:** Understand the impact of engineering solutions in societal and environmental contexts and demonstrate knowledge of sustainable development principles.

PO-8: **Ethics:** Apply ethical principles and commit to professional ethics, responsibilities, and standards of engineering practice.

PO-9: **Individual and Teamwork:** Function effectively as an individual and as a member or leader in diverse and multidisciplinary teams.

PO-10: **Communication:** Communicate effectively on complex engineering activities with the engineering community and society through reports, design documentation, presentations, and clear instructions.

PO-11: Project Management and Finance: Demonstrate knowledge of engineering and management principles and apply them as a team member or leader to manage projects in multidisciplinary environments.

PO-12: **Life-Long Learning:** Recognize the need for and possess the ability to engage in independent and lifelong learning in response to technological advancements and changes.

Program Educational Objectives (PEOs):

PEO 1: To induce strong foundation in mathematical and core concepts, which enable them to participate in research, in the field of computer science.

PEO 2: To be able to become the part of application development and sustainability development by learning the computer programming methods, of the industry and related domains.

PEO 3: To Gain the multidisciplinary knowledge by understanding the scope of association of computer science engineering discipline with other engineering disciplines.

PEO 4: To improve soft skills which build the professional qualities, there by understanding the social responsibilities and ethical attitude.

Program Specific Outcomes (PSOs):

PSO-1: Applications of Computing: Ability to use knowledge in various domains to provide solution to new ideas and innovations.

PSO-2: Programming Skills: Identify required data structures, design suitable algorithms, develop and maintain software for real world problems.

PSO-3: Entrepreneur and higher studies: Make use of computational and experimental knowledge for creating innovative career paths, to be an entrepreneur and desire for higher studies

DEPARTMENT EVENTS

Work shop on Sales force Development Building Custom Applications on Sales force Platform

A **Workshop held on 28-Aug-23 Sales force Development: Building Custom Applications on Sales force Platform** is an excellent opportunity to dive into the world of **Sales force development**, one of the most popular **Customer Relationship Management (CRM)** platforms used by businesses globally. This workshop typically focuses on customizing Sales force to build personalized solutions that meet business needs, providing you with hands-on experience in developing and deploying custom applications on the **Sales force Platform**.

Work shop on Cloud Computing and Its Applications

Workshop on Cloud Computing and Its Applications held on 04-Sep-23 To 06-Sep-23 is an excellent way to gain hands-on experience and understanding of cloud computing technologies. This work shop typically covers the fundamentals of cloud computing, the different types of cloud services, and how they are applied across various industries and business functions.

Internal Smart India Hackathon–23

The **Smart India Hackathon 2023(SIH23)** is held on **23-Sep-23 to 24-Sep-24** an action wide initiative by the Government of India, organized to promote innovation and problem-solving among students. The hackathon invites students from across the country to participate in solving real-world problems faced by various industries, including public and private sectors.

Workshop on Introduction to Block chain & Crypto currency

A Workshop on Introduction to Block chain & Crypto currency held on **30-Sep-23 To 31-Sep-23** is an excellent way to gain foundational knowledge about two of the most disruptive technologies of recent times. This workshop would typically focus on both the technical and practical aspects of Block chain and Crypto currency, providing participants with a comprehensive understanding of how these technologies work, their potential use cases, and how they are shaping industries like finance, healthcare, and beyond.

Guest Lecture on Startup & Entrepreneurship for Techies

A Guest Lecture on Startup & Entrepreneurship for Techies is a valuable event held on **03-Oct-23** for anyone in the tech industry looking to transition into the world of startups or entrepreneurship. These types of lectures are especially use full for tech professionals who have technical expertise but may lack business knowledge and experience.

Workshop on IoT Networking with Cisco IoT Solutions

A **Workshop on IoT Networking with Cisco IoT Solutions** is held on **08-Nov-23 To 09-Nov-23** an excellent opportunity to gain hands-on experience with Internet of Things (IoT) technologies, specifically focusing on networking and the tools provided by **Cisco**, one of the leaders in the networking domain. Cisco's IoT solutions are used extensively across industries for building scalable and secure IoT networks, making this workshop valuable for anyone interested in the field.

Guest Lecture on Software Quality Engineering

A one-day **Guest Lecture on "Software Quality Engineering"** was held on **14-Nov-23** by **Mr.C.Yuktesh, Software Engineer at IBM, Hyderabad**. The session focused on the principles of software quality, testing methodologies, and best practices to ensure the development of reliable and efficient software systems.

Workshop on NLP & Chat bots Development

A **Workshop on NLP & Chat bots Development** is held on **26-Oct-23 To 28-Oct-23** a great way to learn how Natural Language Processing (NLP) can be integrated into chat bots to create intelligent systems capable of understanding and responding to human language. Such workshops typically focus on the core concepts, tools, and technologies involved in building effective NLP-based chat bots.

Guest Lecture on Introduction to Sales Cloud & Service Cloud

A **Guest Lecture on Introduction to Sales Cloud &Service Cloud held on 06-Dec-23** would be an excellent way to learn about Sales force's cloud-based solutions tailored for sales teams and customer service operations.

Workshop on Essentials of Data Science with R

A workshop on the Essentials of Data Science with R held on **05-Feb-24** can provide a comprehensive introduction to the fundamental concepts and techniques used in data science, using R as the primary programming language. R is widely used for Statistical analysis, data visualization, and machine learning tasks. Here 'show you can find or participate in such workshops.

Guest Lecture on Technical Resume & Linked In Optimization

A Guest Lecture on Technical Resume & LinkedIn Optimization held on **21-Feb-24** can be an incredibly valuable session, especially for professionals or students looking to boost their presence in the tech industry. These lectures typically cover essential tips on how to make your resume stand out to recruiters and optimize your LinkedIn profile to increase your visibility. Here are some ways to find or organize such a lecture:

BOOT CAMP on IoT Smart Life

A Boot Camp on IoT Smart Life held on **11-Mar-24** is an intensive training program designed to teach participant show to build and deploy IoT (Internet of Things) solutions that can transform everyday living into a smarter experience. This type of boot camp generally focused so combining IoT technologies with practical, real-world applications, making life more efficient, connected, and automated through smart devices.

Workshop on Docker & Kubernetes for Containerized Applications

Workshop on Docker and Kubernetes for containerized applications is held on **02-Apr-24 To 03-Apr-24** an excellent opportunity to dive into containerization and learns how to manage containerized applications at scale. Docker and Kubernetes are foundational tools in modern DevOps and cloud-native development.

Workshop on Mobile App Development (Flutter/React Native)

Workshop on Mobile App Development focusing on Flutter or React Native, held on **23-Apr-24 To 25-Apr-24** there are many options available. Both frame works are highly popular for building cross- Plat form mobile applications. Here's a guide on how you can get involved in such workshops.

Voice Your Vision: Workshop on Research Presentation Excellence

A one-day workshop titled *"Voice Your Vision: Research Presentation Excellence"* was conducted on **28-Mar -2024** by Dr. Kabita Thaoroijam, Associate Professor, Dept. of CS-AI, SR University, Warangal. The session focused on enhancing students' skills in effective research communication, presentation techniques, and professional delivery.

Guest Lecture on Robotic Process automation:

A one-day **Guest Lecture on Robotic Process Automation (RPA)** was conducted on **13-Mar-2024** by **Mr. Tarun Chauhan, Data Scientist (IoT) at ASTI Infotech, Bangalore**. The session focused on the fundamentals of RPA, its applications in automating business processes, and its growing role in enhancing operational efficiency.