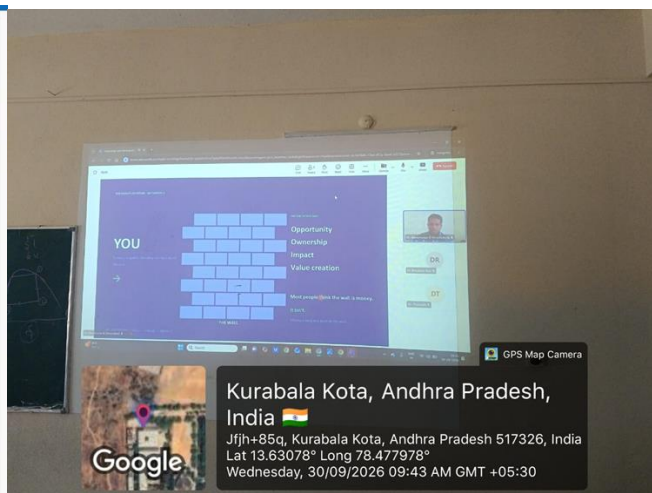


MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (Deemed to be University)



Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi
NAAC Accredited with A+ Grade, NIRF India Rankings 2024 - Band: 201-300 (Engg.)
NBA Accredited - B.Tech. (CIVIL, CSE, ECE, EEE, MECH, CST), MBA & MCA

A Report on **Guest Lecture on** **“Innovation and Startup Incubation for Mechanical Engineers”** **Organized by Department of Mechanical Engineering** **on 30.09.2026**



Report Submitted by: Dr. J Thrinadh, Assistant Professor/Department of Mechanical Engineering

Event Coordinators: Dr Thota S S Bhaskara Rao, Assistant Professor/Department of Mechanical Engineering; Dr. J Thrinadh, Assistant Professor/Department of Mechanical Engineering

Resource Person Details: Dr. Manimaran R, Assistant Professor, School of Mechanical Engineering, SRM Institute of Science and Technology, Tiruchirappalli Campus

Report Received on 03.10.2026

Mode of Conduct: Online

Number of Students Attended: 18 (2nd Year-Mechanical)

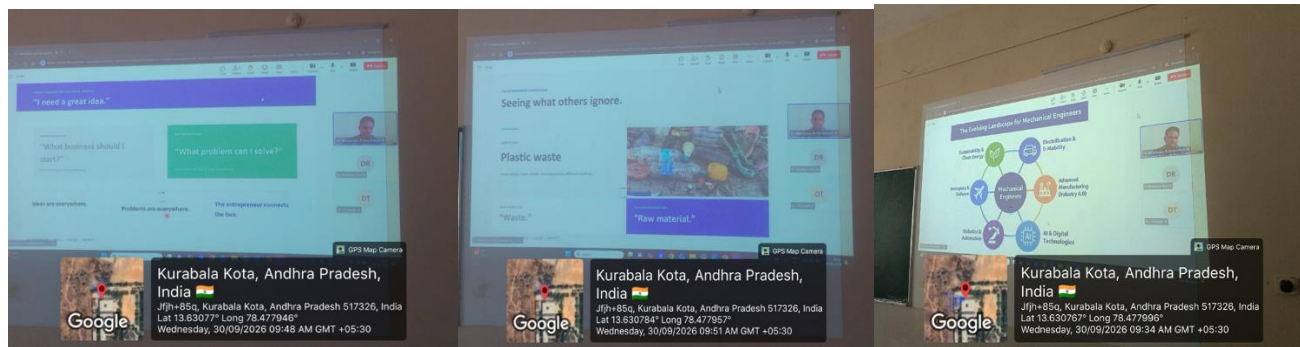
The department of mechanical engineering organized a guest lecture with association of ISTE Student Chapter of MITS on “Innovation and Startup Incubation for Mechanical Engineers” on 30th September 2026 in KKB008 at 9:15 A.M

Objective of the Event:

The objective of the guest lecture “Innovation and Startup Incubation for Mechanical Engineers” was to develop an entrepreneurial and innovative mindset among mechanical engineering students and introduce them to the fundamentals of innovation, problem identification and startup development. The program emphasized that entrepreneurship begins with identifying real-world problems and developing innovative solutions rather than simply searching for a business idea.

The key objectives are to:

- Introduce students to the concepts of innovation, entrepreneurship and startup incubation.
- Develop an entrepreneurial mindset by encouraging students to identify real-world problems and potential opportunities.
- Explain how mechanical engineers can transform technical knowledge and innovative ideas into products, services and startup ventures.
- Develop essential entrepreneurial skills such as technical skills, problem solving, communication, selling, financial literacy, discipline, persistence and risk management.
- Encourage students to identify opportunities by observing problems, waste materials and unmet needs in society and industry.
- Explain the importance of learning from failure, experimentation, iteration and continuous improvement in the startup journey.
- Create awareness about emerging opportunities for mechanical engineers in advanced manufacturing, robotics and automation, AI and digital technologies, electrification and e-mobility, sustainability and clean energy, and aerospace and defense.
- Motivate students to explore startup incubation, innovative projects, research opportunities and technology-based entrepreneurship.



Program Details:

The guest lecture provided valuable insights into innovation, entrepreneurship and startup incubation, particularly from the perspective of mechanical engineering students. The session began by challenging the conventional question, “What business should I start?” and encouraged students to adopt a problem-oriented approach by asking, “What problem can I solve?” The speaker explained that ideas and problems are present everywhere and that an entrepreneur creates value by connecting a real-world problem with an innovative and practical solution.

A major theme of the session was “Seeing what others ignore.” Students were encouraged to observe everyday problems and materials from a different perspective. The example of plastic waste demonstrated this concept effectively. While plastic waste is commonly perceived as “waste,” an entrepreneur may view it as a potential raw material for developing useful products and creating economic value. This example helped students understand the importance of observation, creativity, innovation and resource utilization in entrepreneurship.

The session also introduced the eight essential building blocks of entrepreneurship, namely technical skills, problem solving, communication, selling, financial literacy, discipline, persistence and risk management. The speaker emphasized that successful entrepreneurship requires a combination of technical knowledge and entrepreneurial capabilities. Students were encouraged to continuously develop these skills through practical learning, teamwork, experimentation and real-world exposure.

The importance of failure as part of the innovation and startup journey was also highlighted. The session presented failure as a source of valuable information and learning rather than simply an unsuccessful outcome. The process was explained through the cycle of Failure → Data → Learning → Iteration → Improvement. Students were encouraged to test their ideas, collect feedback, learn from unsuccessful attempts and continuously improve their products or solutions.

Further discussed the evolving landscape of mechanical engineering and the emerging opportunities available to mechanical engineers. Areas such as Sustainability and Clean Energy, Electrification and E-Mobility, Advanced Manufacturing (Industry 4.0), AI and Digital Technologies, Robotics and Automation, and Aerospace and Defense were highlighted. The discussion demonstrated how mechanical engineering knowledge can be combined with emerging technologies to develop innovative products, services and startup ventures.

The lecture also emphasized the importance of startup incubation in converting innovative ideas into viable ventures. Students were encouraged to explore incubation support for developing prototypes, validating ideas, understanding market requirements and progressing from an initial concept towards a practical product or service. The session highlighted the importance of identifying customer problems, developing solutions, testing concepts and continuously improving them based on feedback.

Outcome of the Program:

The guest lecture enhanced students' understanding of innovation, entrepreneurship and startup incubation and encouraged them to adopt a problem-solving approach towards entrepreneurship. Students gained awareness of the importance of observing real-world problems, identifying opportunities, developing innovative solutions and creating value from available resources. The session also helped students understand the importance of technical and entrepreneurial skills, persistence, financial awareness, risk management and continuous improvement.

The discussion on waste as a potential raw material provided students with a practical example of opportunity identification and sustainable innovation. The session also increased students' awareness of emerging areas in mechanical engineering and encouraged them to explore innovative projects, startup ideas, incubation opportunities, research and interdisciplinary career pathways.

Acknowledgments: I express my sincere gratitude to Honourable Chancellor, Pro-Chancellor, Vice-Chancellor, Registrar, Additional Registrar, Dean - School of Engineering, Principal, Vice Principal (Administration), and HOD Mechanical Engineering for their unwavering support and encouragement for conducting the online guest lecture.