MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE
Madanapalle-517325, Annamayya Dist., Andhra Pradesh, India.
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Report

on

"Smart India Hackathon"

Organised by

Department of Civil Engineering

on

09.09.2025

Submitted by: Dr. Nakkeeran G, Assistant Professor, Department of Civil Engineering, MITS.

Organised By: ASCE MITS Student Chapter & Institution's Innovation Council (IIC)

Dignitaries Present

- Dr. Dipankar Roy, Dean, School of Engineering, Madanapalle Institute of Technology & Science (Deemed to be University)
- Dr. Vijayakumar Natesan, Assiatant Professor &Head, Madanapalle Institute of Technology & Science.
- Dr. Nakkeeran G, Assistant Professor, Department of Civil Engineering, MITS

Attendees

50+ Civil Engineering Students

Mode of Conduct

Offline (Concrete Technology Lab)

Objective of the Programme

- To encourage students to apply engineering knowledge and innovation in solving real-life infrastructure challenges.
- To provide a platform for design thinking, creativity, and problem-solving skills.
- To promote entrepreneurship and innovation culture among students.
- To align students' projects with Sustainable Development Goals (SDGs) and the vision of Smart India.

Programme Overview

The Department of Civil Engineering, MITS, organized a Smart India Hackathon on 9th September 2025. The event aimed at providing young innovators with an opportunity to unleash their creativity and propose solutions to real-world civil engineering and infrastructure-related challenges.

The hackathon witnessed enthusiastic participation from civil engineering students, who presented models and solutions in areas such as:

- Smart and energy-efficient construction practices
- Waste-to-resource models
- Smart traffic and transport systems
- Water conservation and renewable energy integration
- Digital and AI-driven solutions for infrastructure management

Participants were guided by faculty mentors and evaluated by a panel of experts based on innovation, feasibility, sustainability, and presentation skills.

Programme Highlights

- Teams showcased innovative solutions for urban and rural infrastructure challenges.
- Faculty mentors provided guidance on applying design-thinking methods.
- Students demonstrated teamwork, leadership, and critical problem-solving skills.
- Jury evaluation included idea pitching, technical feasibility, and sustainability impact.

Outcomes of the Programme

- Students gained hands-on experience in developing innovative solutions.
- The event promoted entrepreneurship, teamwork, and communication skills.
- Participants became aware of sustainable practices and SDG alignment.
- The hackathon served as a preparatory platform for national-level competitions.

Programme Outcomes (POs) Achieved

PO 2 ,PO 3 , PO 6 , PO 9 , PO 10 , PO 12

Knowledge Outcomes (KOs)

- KO 1 – Innovation Skills: Exposure to real-time hackathon culture.
- KO 2 – SDG Awareness: Linking student innovations with
- KO 3 – Critical Thinking: Enhanced logical and analytical thinking.
- KO 4 – Collaboration: Fostered team collaboration and peer-to-peer learning.
- KO 5 – Confidence Building: Strengthened confidence in idea pitching and presentation.

Sustainable Goals

SDG 4 – Quality Education: Enhancing learning through practical exposure and hackathon-based learning.

SDG 8 – Decent Work and Economic Growth: Inspiring innovation and entrepreneurial mindset among students.

SDG 9 – Industry, Innovation, and Infrastructure: Encouraging creative and technology-driven infrastructure solutions.

SDG 11 – Sustainable Cities and Communities: Promoting sustainable, resilient, and smart urban solutions.

SDG 13 – Climate Action: Fostering awareness and ideas to mitigate environmental challenges through sustainable engineering.

Conclusion

The Smart India Hackathon 2025 successfully motivated civil engineering students to explore smart, sustainable, and technology-driven solutions. The event highlighted the

significance of innovation in civil engineering and provided a strong foundation for students to participate in higher-level competitions.

Photos