



MGR ASSOCIATION FOR GREAT INNOVATIVE CREATORS

Department of Civil Engineering

Event Title	Interdisciplinary Lecture- IoT in Smart Building Management Systems		
Objective of Event	Expose participants to IoT sensors, gateways, and integration with Building Management Systems (BMS) for real-time monitoring of HVAC, lighting, and occupancy.		
Chief Guest /Speaker Details	NANDIGAM SUBRAHMANYAM, Asst Professor, Dr Mgr Educational Research Institute		
Date	19/12/2025	Time	02.00 PM to 04.00 PM
Venue	CIVIL SMART ROOM	No. of Participants	60

REPORT

TITLE

Interdisciplinary Lecture- IoT in Smart Building Management Systems

CONTENT

The Interdisciplinary Lecture on IoT in Smart Building Management Systems, held on December 19, 2025, engaged second- and third-year civil engineering students with cutting-edge applications in sustainable infrastructure presentations demonstrated IoT use cases like occupancy sensors reducing energy use by 20-30% and anomaly detection for security, with live examples from global case studies. Dr. NANDIGAM SUBRAHMANYAM, Assistant Professor at Dr. M.G.R. Educational and Research Institute, Chennai, delivered the lecture, drawing from his expertise in IoT systems including deep learning-based recognition and environmental monitoring.

The session covered IoT architectures for real-time building control, such as HVAC optimization, energy-efficient lighting, and predictive maintenance via sensors and AI analytics.

Approximately 60 students attended, fostering interdisciplinary dialogue on smart cities aligned with civil engineering practices like TQM and modular construction.

Interactive Q&A addressed integration challenges in Indian contexts, such as Chennai's urban infrastructure, and tools like BIM with IoT for construction monitoring.



Dr. M.G.R.

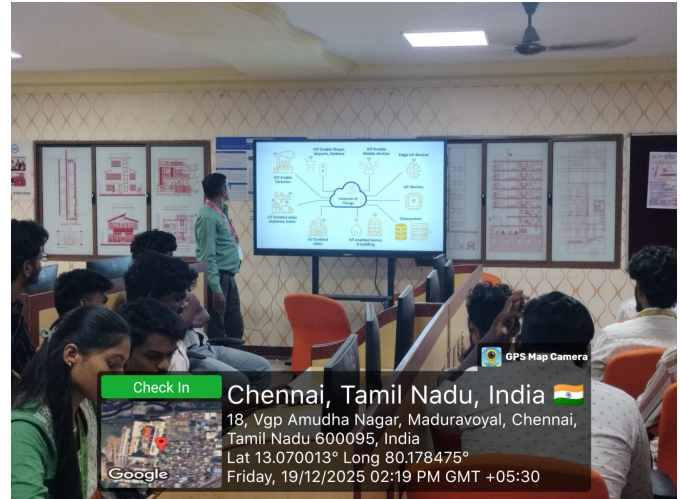
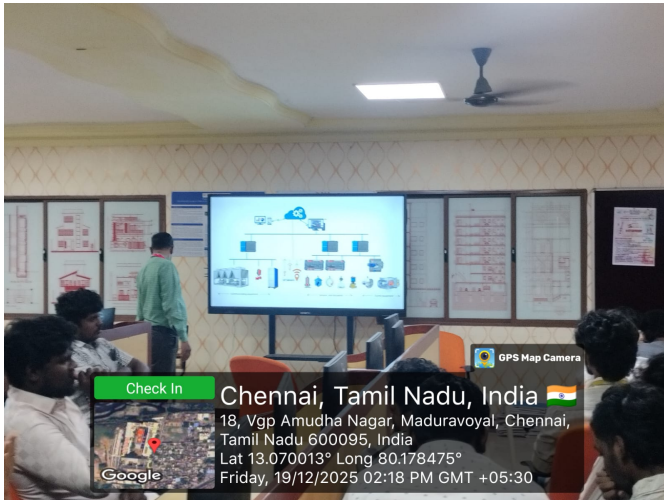
EDUCATIONAL AND RESEARCH INSTITUTE

(Deemed to be University)
Maduravoyal, Chennai - 600 095. Tamilnadu, India.
(An ISO 9001-2015 Certified Institution)



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Students explored hands-on implications, including sensor networks for pollution detection and sustainable building retrofits



EVENT OUTCOME

Participants gain practical understanding of IoT architectures, enabling them to design basic sensor networks for building automation and energy efficiency.

Attendees identify key use cases, such as predictive maintenance reducing downtime and real-time alerts for anomalies like overheating or security breaches.

Students develop skills to apply IoT in construction projects, aligning with smart city goals like reduced carbon emissions and optimized space utilization

PHOTOS



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Mr.S.Ganesh Pandi