



SIGHT 2.0
(Sustainable Innovation for Growth and Human Transformation)
The Tech Expo

Registration Form

Name of the College	Mar Athanasius College of Engineering, Kothamangalam
Department	Computer Applications
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Faculty POC

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Team Details

Team Name: Bit Titans

Branch & Year: MCA 2025

Title of the Project: Smart Waste Bin using IOT

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Declaration by HOD

All the facts stated above are correct to the best of my knowledge.

Place: Kothamangalam

Signature of HOD with Seal

Date: 24-02-2025

Smart Waste Bin Using IOT

Abin Jose, Abhinadh M T, Ananthakrishnan K V, Ajay Das M, Sujith S
*Department of Computer Applications, Mar Athanasius College of Engineering,
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The Smart Waste Bin using IoT addresses the challenge of safe and efficient disposal of hazardous medical waste. This system uses an Arduino microcontroller with ultrasonic sensors to monitor waste levels in real-time. RFID authentication ensures secure access, while automated alerts optimize collection schedules and prevent contamination risks. An LCD module displays real-time waste levels, system status, and access logs for better monitoring. The system uses an ESP8266 Wi-Fi module to upload data to the cloud, enabling remote tracking through a mobile application. Designed to be secure, efficient, and easy to maintain, it ensures safe disposal of hazardous medical waste. By integrating IoT technology with automation, it optimizes waste collection schedules, minimizes contamination risks. The Smart Waste Bin ensures secure and efficient disposal of hazardous waste in healthcare facilities. Using sensors, RFID authentication, and cloud integration, it enables real-time monitoring, optimized collection, and remote tracking via a mobile app. This smart system enhances hygiene, compliance, and safety while reducing manual intervention.

Team Lead:

Verified By:

Place: Kothamangalam

Signature and Seal of HOD

Date: 24-02-2025