

Maharaja Surajmal Institute of Technology

Department of Electronics and Communication Engineering

Report on Industrial Visit to Bioenergy, Biofuels & Biomaterials (BBB) Expo 2026

The Department of Electronics and Communication Engineering (ECE), Maharaja Surajmal Institute of Technology, organized an industrial visit for the 3rd year students of 6th semester to the **Bioenergy, Biofuels & Biomaterials (BBB) Expo 2026** held at Yashobhoomi on **9 May 2026**. A total of **17 students** participated in the visit under Dr. Geetanjali Sharma guidance. The visit was organized with the objective of providing students with exposure to emerging industrial technologies, sustainable energy solutions, advanced instrumentation systems, and interdisciplinary applications of electronics in the energy and environmental sectors.

The BBB Expo 2026 brought together researchers, industrial experts, startups, government organizations, and technology providers working in the domains of renewable energy, biofuels, green technologies, smart monitoring systems, and sustainable industrial processes. The exhibition showcased recent developments in bioenergy production, waste-to-energy technologies, biomass conversion systems, smart automation, AI-enabled monitoring systems, IoT-based industrial control, and environmentally sustainable technologies. The event provided students with an opportunity to interact directly with industry professionals and understand current industrial trends beyond classroom learning.

During the visit, the students explored various exhibition stalls and technical demonstrations related to bioenergy generation systems, biofuel processing technologies, biomass utilization, smart sensing devices, automation platforms, and environmentally sustainable engineering solutions. Several exhibitors demonstrated the integration of embedded systems, wireless communication technologies, IoT devices, and sensor-based monitoring systems in modern energy infrastructure. These demonstrations were particularly beneficial for ECE students as they highlighted the practical implementation of concepts related to sensors, instrumentation, signal processing, embedded systems, communication technologies, and industrial automation.

The students also attended technical sessions and live demonstrations conducted by industry experts and innovators. These sessions provided insights into the role of emerging technologies such as Artificial Intelligence, machine learning, data analytics, and automation in optimizing renewable energy systems and industrial efficiency. The visit helped students understand how electronics and communication engineering plays a vital role in the development of smart energy solutions and sustainable industrial ecosystems.

One of the key learning outcomes of the visit was the exposure to interdisciplinary applications of ECE in sectors such as renewable energy, environmental monitoring, industrial automation, and smart infrastructure. Students observed how real-time data acquisition systems, remote monitoring platforms, wireless sensor networks, and intelligent control systems are being used in modern industrial setups. This enhanced their understanding of the practical relevance of subjects such as microprocessors, digital communication, embedded systems, IoT, control systems, and signal processing.

The industrial visit also encouraged students to think about innovation, research, entrepreneurship, and future career opportunities in emerging technology domains. The interaction with professionals and technology developers motivated students to explore project

ideas and research opportunities related to smart energy systems, sustainable technologies, and intelligent automation. The event helped bridge the gap between academic concepts and industrial applications, thereby improving the students' technical awareness and professional outlook.

Overall, the industrial visit to the BBB Expo 2026 proved to be highly informative, educational, and enriching for the participating students. It provided valuable exposure to modern industrial technologies and highlighted the growing importance of sustainable engineering and intelligent systems in future industries. The visit successfully fulfilled its objective of enhancing practical knowledge, industrial awareness, and technical understanding among the ECE students. The Department of ECE expresses its gratitude to the organizers of the BBB Expo 2026 and the institute administration for facilitating this valuable learning experience for the students.





List of the students:

- 1. Karan Vashishtha**
- 2. Gaurav Solanki**
- 3. Ashish Sharma**
- 4. Sneha Juyal**
- 5. Prachi**
- 6. Ansh Raj**
- 7. Richa**
- 8. Astha Rajsingh**
- 9. Harish**
- 10. Nikhil Sharma**
- 11. Mayank Saraswati**
- 12. Kashish Dhawan**
- 13. Jas**
- 14. Dishaa**
- 15. Rishit**
- 16. Gaurav**
- 17. Kaushal**