

## Report on Seminar Presentation

**Date:** 18-10-2024

**Time:** 01:00 PM-4:00 PM

**Venue:** Room No. 7, Main Building

**Event:** Seminar Presentation by B.Tech Students

A seminar presentation was conducted by Mechanical Engineering Department for the undergraduate students in Room No. 7. The event showcased innovative ideas and technical knowledge from various Mechanical Engineering field.

### Key Highlights:

- **Presentations:** Students presented on topics ranging like Artificial Intelligence, Robotics and Advancements in renewable energy and sustainable engineering practices.
- **Teamwork:** Students presented in teams of 3-4
- **Innovative Solutions:** Several groups proposed real-world solutions, such as smart fire management systems, energy-efficient buildings, and integrated renewable energy systems.
- **Interactive Session:** The audience, including faculty members and peers, engaged in an interactive Q & A session after each presentation. Constructive feedback was provided by the faculty.
- **Evaluation:** Presentations were evaluated based on technical content, presentation skills, innovation, and the feasibility of proposed solutions.

### Key Topics Presented:

- **Advanced Manufacturing Technologies:**
  1. Students presented on the role of 3D printing, CNC machining, and laser cutting in revolutionizing the manufacturing process.

- **Renewable Energy Systems:**

1. Several groups focused on sustainable energy sources, particularly solar and wind energy, and how mechanical engineering innovations can optimize energy conversion.
2. Projects included solar-powered water heating systems and wind turbine blade design improvements.

- **Automobile Engineering Innovations:**

1. Presentations on hybrid and electric vehicle technology highlighted advancements in fuel efficiency, emission reduction, and alternative energy use.
2. Some teams explored automotive aerodynamics and how lightweight materials are improving vehicle performance and reducing energy consumption.

- **Robotics and Automation:**

1. Students demonstrated the integration of robotics in fire safety.

- **Heat Transfer and Thermodynamics Applications:**

1. Topics covered included innovative heat exchangers and energy storage systems for industrial applications.
2. Some presentations focused on thermodynamic cycles

#### **Outcome:**

The seminar provided students with an opportunity to apply theoretical knowledge in practical projects, enhancing their research, communication, and problem-solving skills. Faculty members appreciated the students' efforts and encouraged them to continue pursuing innovative projects.



