## REPORT ON SEMINAR: EXPERT LECTURE ON ALL-TERRAIN VEHICLES (ATVs)

Organized by: Engineering Technology Society, Electrical Engineering Department

Date: 29 September 2025

Venue: Electrical Engineering Seminar Hall

The Engineering Technology Society of the Electrical Engineering Department organized a highly informative seminar titled "Expert Lecture on All-Terrain Vehicles (ATVs)" on 29 September 2025. The session aimed to expand students' technical understanding of modern vehicle dynamics, power systems, and cross-disciplinary innovation.

The event was graced by esteemed Society Mentors and faculty members, creating an environment filled with learning, encouragement, and practical insights.

## ☐ Highlights of the Expert Lecture

Society Mentor, Mr. Lokesh Bhardwaj, delivered an insightful and deeply engaging lecture on the world of All-Terrain Vehicles (ATVs). He explained:

- The fundamental design principles of ATVs
- Key engineering mechanisms involved in traction, suspension, and stability
- Real-world applications of ATVs in defense, agriculture, rescue operations, and sports
- The importance of integrating mechanical and electrical systems in modern mobility

His session helped students connect theoretical concepts with practical engineering scenarios. The clarity, real-life examples, and enthusiasm in his talk made the session highly enriching for all participants.

## ☐ Technical Guidance on Electrical Machines

**Society Mentor, Dr. Aviral Awasthi**, shared his expertise on **electrical machines**, focusing on how they power and complement technologies used in ATVs and other modern vehicles. He guided students on:

- Motor selection in electric and hybrid ATVs
- Efficiency considerations in traction motors
- Future scope of electrical technologies in advanced mobility systems

His explanations simplified complex concepts and encouraged students to explore deeper into the field.

☐ Motivational Words by HOD & Society Mentor
<b>Head of Department &amp; Society Mentor, Mr. Gajendra Singh Rawat</b> , addressed the students and highlighted the importance of technical exposure beyond textbooks. He emphasized:
<ul> <li>The growing opportunities in vehicle technologies</li> <li>The role of interdisciplinary learning</li> <li>The value of active participation in departmental events</li> </ul>
His words served as motivation for students to pursue innovation with dedication.
☐ Event Coordination
The seminar was successfully coordinated under the guidance of:
<ul> <li>Mr. Gajendra Singh Rawat</li> <li>Mr. Lokesh Bhardwaj</li> <li>Mr. Aviral Awasthi</li> </ul>
Their continuous efforts ensured that the session remained smooth, interactive, and impactful.
☐ Student Coordinators
The seamless organization of the event was made possible through the commendable support of the Student Coordinators:
<ul> <li>Prince Sharma</li> <li>Dhruv Sharma</li> <li>Dhruv Pathak</li> <li>Nitin Joshi</li> <li>Aryan Kapoor</li> <li>Ankush Bhatt</li> </ul>
Their dedication in managing logistics, registrations, and technical arrangements contributed significantly to the event's success.

 $\Box$  Conclusion

The seminar proved to be a valuable learning experience for the students of the Electrical Engineering Department. The expert insights on ATVs, coupled with guidance on electrical machines and encouragement from faculty mentors, expanded the students' understanding of real-world engineering.

The Engineering Technology Society aims to continue conducting such knowledge-enhancing events in the future.

































