

Team Endurance Racing Event Report – SAE eBAJA 2025

Event Details:

- **Event Name:** SAE eBAJA 2025
- **Event Type:** National-Level Electric All-Terrain Vehicle Engineering Competition
- **Organized By:** SAEINDIA
- **Venue:** BVRIT, Narsapur, Hyderabad
- **Dates:** 20th February 2025 – 23rd February 2025

Overview:

Team Endurance Racing, the official SAE BAJA team of Vishwakarma Institute of Technology, Pune, successfully participated in **SAE eBAJA 2025**, marking a major milestone as this was the **team's debut year in the electric vehicle category**. With months of rigorous preparation and innovation, the team designed and built an electric all-terrain vehicle (ATV) adhering to industry standards and competition guidelines.

Performance Highlights:

- **Overall Rank:** AIR 16th
- **Engineering Design:** AIR 4th
- **Altair Simulation Event:** AIR 1st
- **Endurance Race:** AIR 11th
- **Virtual Dynamic Event:** AIR 11th

Key Achievements:

- Developed our first in-house **Electric Powertrain and Battery Pack** using EVE LFP Prismatic Cells.
- Achieved **top rank in Altair Simulation Event**, showcasing our strong command over virtual validation and optimization.
- Placed in the **top 5 nationwide** in Engineering Design, demonstrating our innovation, design process, and manufacturability standards.

Team Impact:

The competition provided hands-on experience in EV design, testing, safety validation, and project management under real-world constraints. It also helped strengthen our inter-disciplinary teamwork and built industry-ready skillsets among all members.

Future Scope:

Team Endurance Racing is now aiming to further optimize our electric ATV for SAE eBAJA 2026 with improved performance, reliability, and manufacturability. We are also exploring advanced battery management systems, lightweighting techniques, and smart diagnostics for the next edition.

Acknowledgements:

We sincerely thank the college management, faculty advisors, and all departments for their continued guidance and support throughout this transition to electric mobility.

