



SPCE RACING

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Result Report
SPCE Racing Electric
Formula Bharat 2024

(Held at Coimbatore from January 19 to January 24)

Final Results

Overall

Overall Rank: 9th

Overall Score: 256.75/1000

Statics Scores

Business Plan: 73/75 (Winner)

Engineering Design: 105.75/150

Cost & Manufacturing: 88/100 (4th)

SPCE Racing Electric, comprising 45 dedicated engineering students of the Mechanical, Electrical and Civil departments, participated in **Formula Bharat 2024** with our meticulously crafted formula-style electric race car “**Voltron 2.0**”. The competition, renowned for its rigorous technical inspections and dynamic events, provides a platform for aspiring engineers to showcase their innovation, teamwork, and technical prowess.

To enhance the team's diversity and expertise, there is a growing emphasis on increasing the participation of **Electrical department students**, fostering a collaborative environment where their unique skill sets and perspectives can contribute to the team's success.

Initiatives are being implemented to engage **Civil department students**, recognizing their valuable contributions in areas such as structural integrity, materials science, and project management, thus fostering a multidisciplinary approach to innovation and excellence within the team.

Technical Inspections:

Our team successfully **cleared the Electrical Technical Inspection**, demonstrating our adherence to stringent safety standards and technical proficiency. However, challenges arose during the Accumulator Technical Inspection and Mechanical Technical Inspection, preventing us from completing them within the stipulated timeframe. Consequently, we were disqualified from the dynamic events, a setback shared by all-electric vehicle teams due to the heightened safety compliance measures enforced by the Formula Bharat administration this year.

Static Events:

Despite the setback in the dynamic events, SPCE Racing Electric excelled in the static events, where the final results were determined solely based on performance in these segments. We proudly secured the **1st rank in the Business Plan event**, showcasing our comprehensive understanding of project management, marketing strategy, and financial planning. Additionally, our team achieved the **4th rank in the Cost & Manufacturing event**, highlighting our meticulous attention to detail and innovative cost-effective solutions.

Photos:



Group photo with Dr. Santosh Rane - Faculty Advisor SPCE Racing Electric



Hon. Principal sir unveils the Voltron 2.0 car



Team at Coimbatore Junction for Formula Bharat 2024



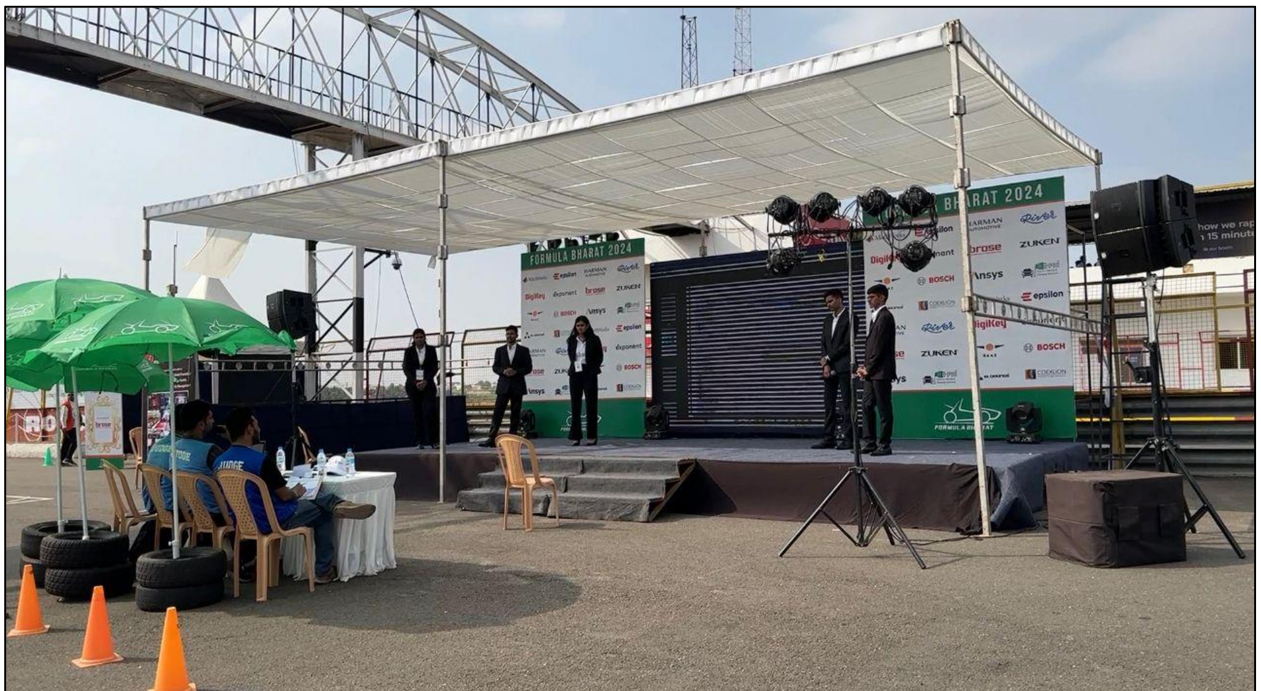
E15 SPCE Racing Electric Pit



E15 car on the event site



Team at Mechanical Inspection



Business Plan Finals



Business Plan Finals



Cost & Manufacturing Event Finals



Judge Interaction and Feedback



Judge Interaction and Feedback



Interaction with Other Teams



Members of SPCE at Different Informational Sponsor Stalls



Team SPCE Racing Electric for FB2024

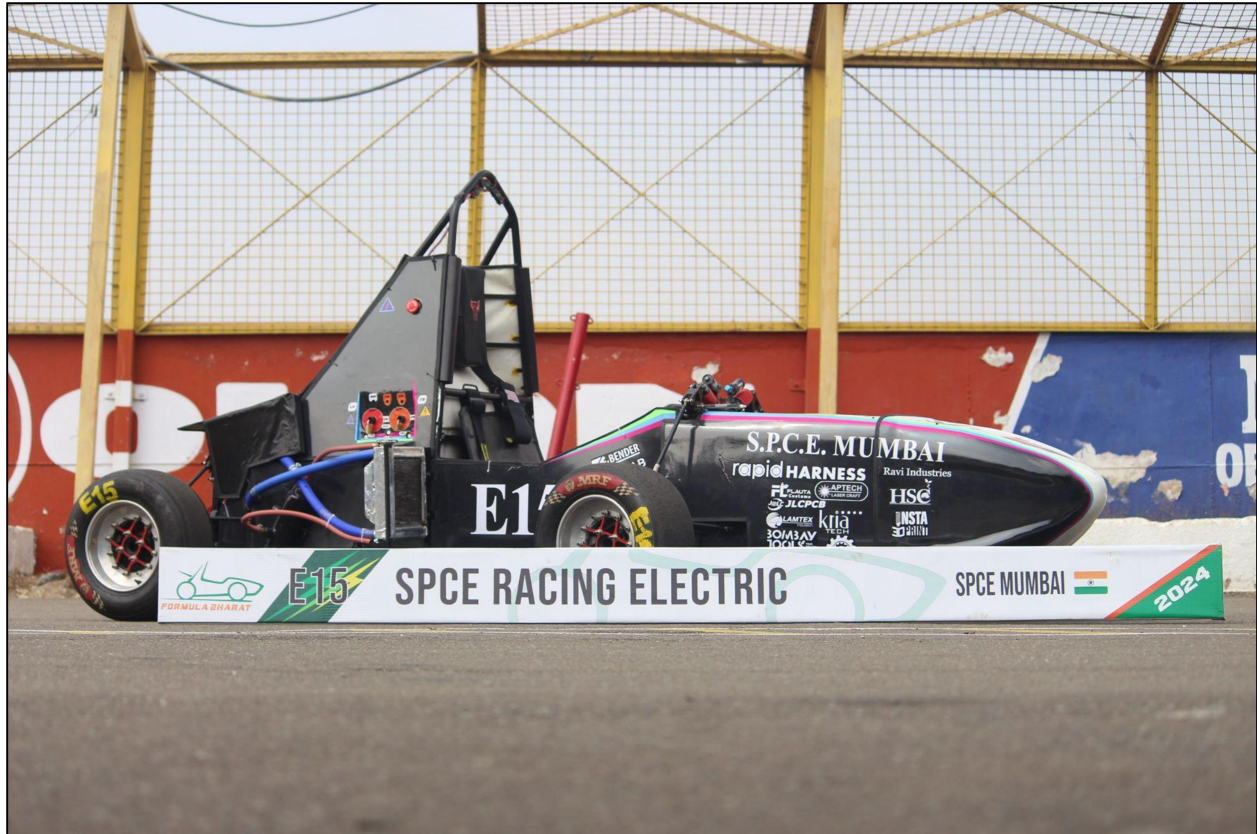


Business Plan Award Ceremony for First Place



Business Plan Award





Voltron 2.0

Setbacks Faced in this Season:

SPCE Racing Electric encountered several setbacks during the Formula Bharat 2024 season, which impacted our performance and posed significant challenges. Some of the major setbacks include:

Financial Struggles: Organizing the necessary funds required for procuring parts and covering other expenses was a significant hurdle for our team. Limited resources posed challenges in meeting our financial obligations and acquiring essential components.

Error in Precision Tool: An error in a precision tool resulted in a setback, necessitating the recreation of a firewall component. This unexpected issue consumed valuable time and resources, affecting our overall progress in the competition.

Lack of Reliable Components: Due to funding issues, procuring high-quality, reliable electrical, and mechanical components proved to be a challenge. This impacted the overall reliability and performance of our race car.

Technical Challenges: The team faced technical challenges during the design and manufacturing process of the race car, including integration issues with various components, software glitches, and unexpected failures during the testing phases. These challenges led to delays in progress and required additional troubleshooting efforts.

Lack of Proper Testing Area: The team encountered challenges due to the unavailability of a suitable testing area to conduct extensive test runs of our race car. Without access to a dedicated testing facility, the team's ability to validate and fine-tune the vehicle's performance was limited. This constraint impeded the team's ability to optimize the race car's capabilities and identify potential issues before the competition, impacting overall readiness and performance.

Reflecting on our experience at Formula Bharat 2024, we recognise areas for improvement and growth and have formed a lesson learnt document for the 2023-2024 season. SPCE Racing Electric remains committed to continuous learning, innovation, and excellence. We are determined to overcome challenges, refine our skills, and emerge stronger in future competitions.

Participation in Formula Bharat 2024 has been a transformative journey for SPCE Racing Electric, showcasing our team's resilience, technical prowess, and commitment to excellence. We thank our mentors, sponsors, and supporters for their invaluable guidance and encouragement. With newfound insights and determination, we look forward to pushing the boundaries of innovation and representing our institution with pride in the next Formula Bharat competition.

Team Leader
SPCE Racing