



# ***FIREBOLT*** ***RACING***



**2024-2025**  
**SPONSORSHIP BROCHURE**





# ABOUT BIT MESRA

Birla Institute of Technology, Mesra, Ranchi, stands as an indomitable institution of academic excellence since its illustrious inception in 1955. Widely regarded as one of India's most prestigious and premier universities, BIT Mesra has consistently aspired to transcend boundaries and attain international recognition as a paragon of learning in engineering and technology.

This venerable institution has etched its name in the annals of higher education with a visionary commitment to cultivating minds, fostering innovation, and driving the frontiers of research and development. It has earned an unwavering reputation as an exemplar of efficiency, with an unparalleled prowess that extends across myriad domains, thereby epitomizing its noble motto - "Sa Vidya Ya Vimuktaye," which encapsulates the profound belief that learning is the ultimate liberation.

Setting benchmarks and pioneering new horizons, Birla Institute of Technology, Mesra, holds the distinction of being the trailblazer in India. It not only established the groundbreaking Department of Space Engineering and Rocketry in collaboration with the esteemed Indian Space Research Organization (ISRO) but also paved the way for budding entrepreneurs by offering them essential project funding, making it a crucible of entrepreneurial brilliance.

To be part of this august institution is not just a privilege but a profound source of pride and boundless joy. BIT Mesra's relentless pursuit of knowledge, its penchant for innovation, and its commitment to fostering human potential make it a beacon of higher learning in India and a sterling example of academic excellence on the global stage.





## ABOUT THE TEAM

FIREBOLT RACING, the distinguished off-road racing team representing Birla Institute of Technology, Mesra, India, comprises a dedicated assembly of 30 undergraduate automotive enthusiasts hailing from diverse disciplines. Their collective mission: crafting the ultimate All-Terrain Vehicle (ATV) and competing in the illustrious BAJA SAE, the world's foremost amateur racing championship. These individuals, drawn from various engineering streams, share an unwavering passion for speed, elevating this team to the zenith of prestige and acclaim within the nation.

In the most recent edition of the BAJA SAE International competition, our team soared to remarkable heights, securing the 18th overall rank on the global stage, a feat unparalleled in our homeland. Notably, we achieved the 8th position in Sales Presentation and the 14th position in the Cost event. Every facet of crafting the All-Terrain Vehicle, from the intricacies of design to the meticulous procurement of funds, assembly, and rigorous final testing, is meticulously executed by our student team.

Dedicated to upholding our team's cherished ideals, we continue our relentless pursuit of excellence aspiring to ever-greater heights in order to magnify the reputation of our esteemed institution and our beloved nation on a global scale, a destiny that lies just over the horizon.

# ABOUT THE COMPETITION

BAJA SAE, originating at the University of South Carolina in 1976 under Dr. John F. Stevens' visionary leadership, stands as the zenith of collegiate engineering competitions. Universities worldwide convene to conceive, construct, and rigorously assess their off-road marvels, all in pursuit of engineering supremacy. These single-seat prototypes embody traits like reliability, ergonomic excellence, and cost-effectiveness, tailored for the recreational user market.

The BAJA series extends its global reach to the **USA, Canada, India, Brazil, Korea, South Africa, and Mexico**, uniting exceptional talent in a showcase of technological innovation.

## North America

BAJA SAE ARIZONA  
BAJA SAE LOUISVILLE  
BAJA SAE ILLINOIS

## South America

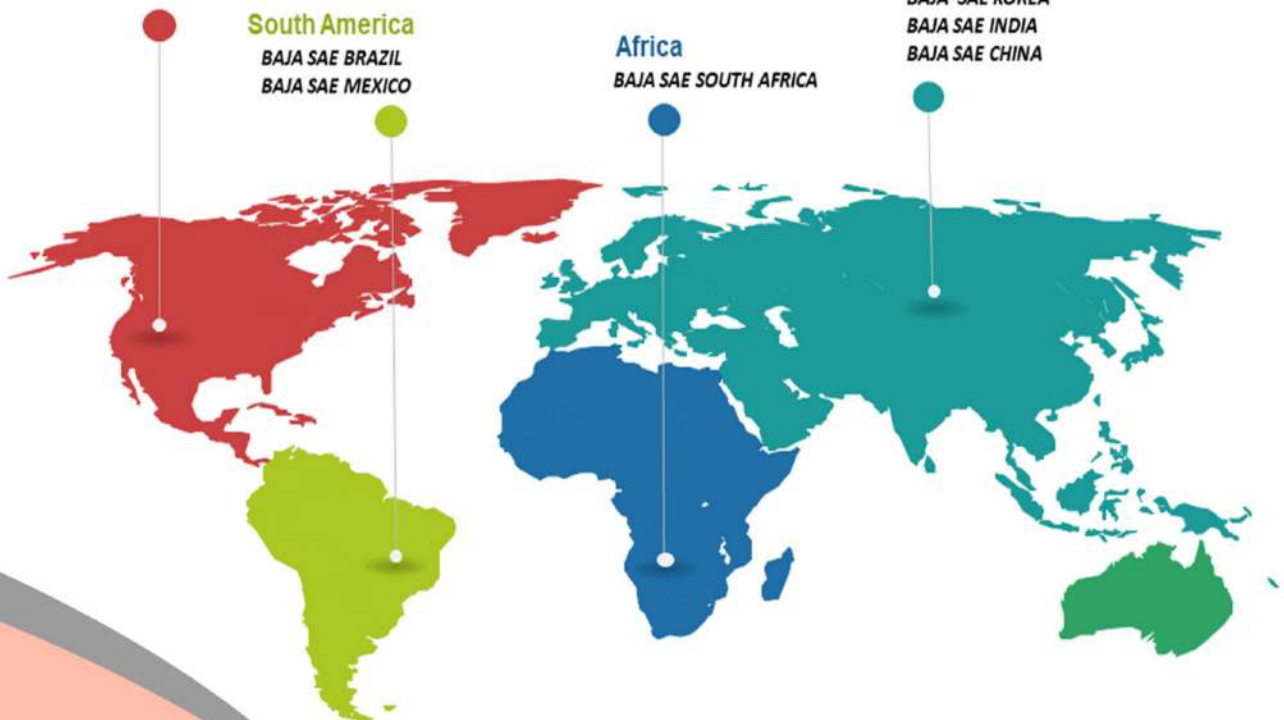
BAJA SAE BRAZIL  
BAJA SAE MEXICO

## Africa

BAJA SAE SOUTH AFRICA

## Asia

BAJA SAE KOREA  
BAJA SAE INDIA  
BAJA SAE CHINA







## BAJA SAE INDIA

BAJA SAE INDIA, initiated in 2002, has evolved into a grand event, featuring 350+ teams and over 10,000 participants. Held in Indore Pithampur in January and Punjab in March, it's organized by SAE INDIA with key partners like Mahindra & Mahindra Ltd., Bharat Petroleum, and Hero.

Over 400 teams registered for a virtual round in July, with the pandemic round held in December (India). 180 top teams were selected for the final BAJA SAE INDIA event, attracting renowned engineering colleges, including IITs and NITs. The competition also welcomes international teams, fostering a fiercely competitive environment. BAJA SAE INDIA comprises static and dynamic events, from design evaluation and cost analysis to thrilling challenges like Acceleration, Hill Climb, Rock Crawl, and Endurance, pushing the boundaries of off-road vehicle performance.

## BAJA SAE INTERNATIONAL

The illustrious BAJA SAE INTERNATIONAL, inaugurated in 1976, transcends borders and beckons enthusiasts to compete in the United States, Brazil, Korea, South Africa, and México annually. This fiercely competitive spectacle has carved a global niche, captivating motorsport aficionados worldwide, with more than 100 teams from universities and colleges around the world vying for participation in each event. The international events bear the imprimatur of SAE International, a hallmark of excellence. Our vehicle design process is nothing short of exceptional, characterized by the employment of cutting-edge software such as IPG Carmaker, Solidworks, and Ansys. The designs undergo meticulous scrutiny through advanced tools like Hyperworks, ensuring they stand the test of rigor and precision. Even in the face of a global pandemic, our unyielding spirit persevered, demonstrating our indomitable will to continue learning and adapting. We emerged triumphant in the realm of online education, conducting seamless procedures and intensive training sessions, catapulting ourselves beyond both international and national competitors.



# BUDGET REQUIREMENTS

**₹2,93,150**

## Roll cage + Driver safety

- Seat belt, Helmet, Body Suit SFI Rated
- Body Panels
- Transponder

**₹5,71,350**

## Vehicle Dynamics

- AFCO Shock Absorbers
- 4WD Front Assembly
- Spring Design and Manufacturing

**₹1,50,000**

## Electricals

- Driver Dashboard
- Data Acquisition PCBs
- Damper Potentiometers



**₹1,04,300**

## Brakes

- Customized Rotor
- Custom Designed Caliper
- Wilwood OEM Master Cylinder

**₹4,50,000**

## Transmission

- CVT
- Differential
- Gearbox + Transfer Case

**₹10,03,350**

## Miscellaneous

- Transportation
- Event Registration
- Tools

**TOTAL BUDGET - ₹25,72,150**

# SPONSORSHIP BRACKETS



## ELITE: ₹2,00,000

- Sponsor gets all Gold benefits.
- Gets the title sponsor rights.
- Car naming and colour combination rights.
- Availability of car at any time for events.
- Silver Sponsor grading for the next year.



## GOLD: ₹1,00,000

- Sponsor gets all Silver benefits.
- Banner at vehicle launch and event site.
- Exclusive posts from team's social pages.
- Bronze sponsor grading for next year.



## SILVER: ₹50,000

- Sponsor gets all Bronze benefits.
- Mention in team videos.
- Vehicle availability for promotional events.



## BRONZE: ₹25,000

- Sponsor gets logo space on team car and the helmet of driver.
- Shoutout from social media pages and official newsletter.



# THE TIMELINE TO SUCCESS



## JANUARY 2024

- BAJA SAE India 2024

## DECEMBER 2023

- Testing of ATV completes.
- Manufacturing of spare spare completes.

## NOVEMBER 2023

- Manufacturing of ATV completes.
- Testing of ATV begins.

## OCTOBER 2023

- Manufacturing of ATV begins.
- Finalization of design virtuals participation.

## AUGUST 2023

- Finalization of design virtuals participation.

## JUNE 2023

- Formation of new team .
- Registration for BAJA SAE India 2023



# THIS SEASON

## BAJA SAE INDIA 2024



SALES  
PRESENTATION



OVERALL  
STATIC



COST EVENT

## BAJA SAE INDIA 2022



SALES  
PRESENTATION



RAFTAAR  
AWARD



ACCELERATION  
EVENT



DESIGN  
PRESENTATION



VALIDATION  
EVENT



ENDURANCE  
EVENT



OVERALL  
VIRTUALS



OVERALL  
STATIC



OVERALL



# OUR ACHIEVEMENTS



**BUSINESS PRESENTATION  
BAJA INTERNATIONAL  
2021  
(IN INDIA)**



**COST EVENT  
BAJA INTERNATIONAL  
2021  
(IN INDIA)**



**BUSINES PRESENTATION  
BAJA INTERNATIONAL  
2021  
(OVERALL)**



**SALES PRESENTATION  
BAJA 2021**



**COST EVENT  
BAJA INTERNATIONAL  
2021  
(OVERALL)**



**ACCELERATION BAJA  
2020**



**EAST INDIA  
2020**



**MANEUVERABILITY BAJA  
2020**



**OVERALL MEGA ATV  
LOREPSUM**



**OVERALL BAJA  
2018**



**ENDURANCE MEGA ATV  
2019**



**FLAT DIRT RACE MEGA  
ATV 2019**



**VIRTUALS BAJA  
2018**



**GO GREEN  
BAJA 2018**



**SUSPENSION TRACTION  
BAJA 2019**



**GO GREEN BAJA  
2017**



# WHY SPONSOR US

## PUBLICITY

### LOCAL



NEWSROOM



PANTHEON



ADVENTURE  
SPORTS



BITOTSAV

### ALL YEAR ROUND



SOCIAL  
MEDIA



MAGAZINE



FACEBOOK



WEBSITE



BROCHURE

## OTHER DELIVERABLES



VIDEOS



OFFICIAL WEAR



FOOTFALL



YOUTUBE LIVE



BANNER



SHOUTOUT



PAMPHLET

## NUMBERS



15,000+ FOOTFALL



350+ PARTICIPATING  
COLLEGES



15000+  
PARTICIPANTS



8700+  
FOLLOWERS



20+ MNCs  
PARTNERSHIP





# MEDIA COVERAGE

## BIT Mesra off-road racing team to take part in m-BAJA SAE 2022



Firebolt Racing, the official off-road racing team of Birla Institute of Technology (BIT) Mesra, is all geared up to get vooming in the third phase of m-BAJA SAE 2022 in Pithampur, India.

The team will be represented by a multidisciplinary group of around 30 automobile lovers.

The Society of Automotive Engineers (SAE) India, has started the physical Round of the 15th edition BAJA SAE India after two years. The five-day event will incorporate the technical inspection of the physical ATVs of the participating teams, followed by dynamic events such as brakes, acceleration, draw pull, suspension and traction, manoeuvrability, and all-terrain performance.

## BIT Mesra's Team Firebolt wins laurels at m-BAJA SAE 2022



Team Firebolt Racing was represented by a group of around 30 students from the 2021, 2022 and 2023 batches. The team was led by faculty advisor Parashank Mishra. During the event, the team won the 3000m race and the 1000m race.

The team bagged eight medals in the event. It ranked 10th in the overall standings. It was placed at eight and in the overall 10th rank in the 1000m race.

BAJA SAE India is an inter-collegiate design competition where participants conceptualize, construct, build, test and validate a single-seater, four-wheeled off-road vehicle (ATV). The design is the conventional competition of off-road cars while a BAJA has students designing and building electric-powered ATVs.

## National Science Day: बीआईटी मेसरा के छात्र ने बनाया 65 किमी की रफ्तार से उबड़ खाबड़ रास्ते पर दौड़ने वाली कार, जानिए विशेषता...

टीम के सदस्यों ने इस पर प्रयास की और जीतने के लिए...

अमेरिका का यह विज्ञान दिवस है जिसे देश भर के विज्ञान छात्रों को बताने के लिए मनाया जाता है। इस दिन विज्ञान के क्षेत्र में अग्रणी कामों को सम्मानित किया जाता है। बीआईटी मेसरा के छात्रों ने इस अवसर पर एक विशेष प्रदर्शन किया। उन्होंने एक कार बनाई जो 65 किमी की रफ्तार से दौड़ सकती है। यह कार उबड़ खाबड़ रास्ते पर दौड़ने के लिए डिज़ाइन की गई है।

मेसरा के छात्रों ने इस प्रदर्शन में भाग लिया। उन्होंने अपनी कारों को प्रदर्शित किया। यह कारों को देखने के लिए बहुत सारे लोग आए। छात्रों ने अपनी कारों की विशेषताओं को बताया।

## बीआईटी मेसरा की टीम फायरबोल्ट ने हासिल की ओवरऑल टॉप-10 रैंक

350 टीमों ने प्रतिस्पर्धा की। टीमों ने अपनी कारों को प्रदर्शित किया।

संस्करण, रहीं...

बीआईटी मेसरा की टीम फायरबोल्ट ने 350 टीमों में प्रतिस्पर्धा की। उन्होंने अपनी कारों को प्रदर्शित किया। यह कारों को देखने के लिए बहुत सारे लोग आए। छात्रों ने अपनी कारों की विशेषताओं को बताया।



टीम-10 के रूप में प्रदर्शित करने के बाद टीम मजबूती टीम फायरबोल्ट।

Birla Institute of Technology-Mesra wins Team Firebolt from Birla Institute of Technology-Mesra won three prizes at the recent BAJASAE India 2022. The team also created an ATV, which has the distinction of being the second lightest in the country.

## Cityभास्कर

## बीआईटी मेसरा के छात्रों ने बनाई ऐसी गाड़ी जो पहाड़, रेगिस्तान, खेत में आसानी से चल सकेगी

बीआईटी मेसरा के छात्रों ने एक ऐसी गाड़ी बनाई है जो पहाड़, रेगिस्तान, खेत में आसानी से चल सकेगी। यह गाड़ी का नाम 'फायरबोल्ट' है। यह गाड़ी का डिज़ाइन और निर्माण बीआईटी मेसरा के छात्रों ने किया है। यह गाड़ी का वजन बहुत कम है और यह गाड़ी बहुत तेज़ चल सकती है।



यह गाड़ी का नाम 'फायरबोल्ट' है। यह गाड़ी का डिज़ाइन और निर्माण बीआईटी मेसरा के छात्रों ने किया है। यह गाड़ी का वजन बहुत कम है और यह गाड़ी बहुत तेज़ चल सकती है।

यह गाड़ी का नाम 'फायरबोल्ट' है। यह गाड़ी का डिज़ाइन और निर्माण बीआईटी मेसरा के छात्रों ने किया है। यह गाड़ी का वजन बहुत कम है और यह गाड़ी बहुत तेज़ चल सकती है।

## बीआईटी का फायरबोल्ट रेसिंग में शानदार प्रदर्शन

बीआईटी का फायरबोल्ट रेसिंग में शानदार प्रदर्शन। टीम ने अपनी कारों को प्रदर्शित किया। यह कारों को देखने के लिए बहुत सारे लोग आए। छात्रों ने अपनी कारों की विशेषताओं को बताया।

## Cityभास्कर

अतीवर्ध- देशभर के 81 टीमों में 30 पार्सी थीं, बीआईटी की टीम में 30 छात्र शामिल थे, गाड़ी नेवार करने में 10 लाख रूप बाहा एसएई इंडिया में बीआईटी मेसरा की फायरबोल्ट रेसिंग टीम को मिले 3 अवार्ड, सेल्स प्रेजेंटेशन में फर्स्ट, रफ्तार में सेकेंड, एक्सलोरेशन में थर्ड

बीआईटी मेसरा की फायरबोल्ट रेसिंग टीम को पिछले साल भी अंतरराष्ट्रीय स्तर पर 18वीं रैंक मिली थी।



Prime Minister Narendra Modi inaugurated 'Defence Expo 2022' in Gandhinagar, Gujarat, on 19th October.

देशभर के कई राज्यों से 200 से ज्यादा टीमों अपने-अपने ऑल टैरन कीकल के साथ प्रतियोगिता में भाग लेंगी।





# FOUNDATION OF OUR SUCCESS



## CONTACT US



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