



CEG MOTORSPORTS

THE SAE COLLEGIATE CLUB OF CEG



Team CEG Motorsports is the official SAE Collegiate club of College of Engineering, Guindy. We design and fabricate an ATV every year to compete with teams from all over India in the SAE BAJA competition. Our objective is to compete with the vehicle as the prototype for a production off-road vehicle.

DRIVEN TO PERFORM

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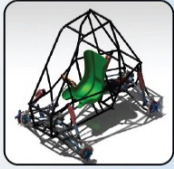
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MISSION IN ACTION

Our team works towards the effective designing, fabricating and testing of the off road Electric Vehicle with the primary goal of participating in BAJA SAE INDIA competition that tests our vehicle's performance in various fields like maneuverability, acceleration, speed and gradeability.



DESIGN



BUILD



RACE

DRIVEN TO PERFORM

> We are dedicated to uphold the remarkable 18-year legacy established by our seniors and the entire team, despite the numerous challenges and obstacles they encountered.

> Our approach involves crafting a cutting-edge terrain hunter ATV with expertise and collaborative teamwork. By pushing the boundaries of innovation, we strive to position our vehicle at the forefront, surpassing the competition posed by numerous teams from diverse universities and colleges across the nation, all converging at the esteemed National Automotive Test Tracks (NATRAX) in Indore.

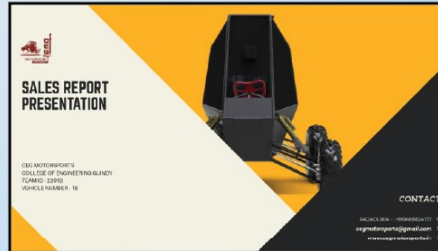


VIRTUAL EVENTS



DESIGN PRESENTATION

The objective of the Engineering Design Event is to evaluate the effort that goes into the design of the vehicle and how the engineering meets the intent of the market



SALES PRESENTATION

The objective of the Sales Presentation is for the team to convince the "executives" of a hypothetical manufacturing company to purchase the team's Baja SAEINDIA vehicle design and put it into production



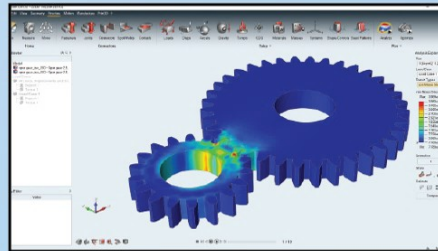
COST PRESENTATION

Cost Presentation consists of two related sections: Cost Report and Prototype Cost. The cost report provides all the background information to verify the vehicle's actual cost. The prototype cost is the actual cost and the points related thereto



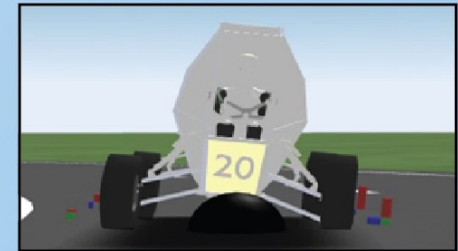
GO GREEN PRESENTATION

Our team has developed a catalytic converter, that uses a Cu-Zn-Al compound in order to reduce harmful CO₂ emissions into hydrogen. Doing so will also allow us to capture the released hydrogen, that can be used for other applications.



CAE PRESENTATION

CAE Presentation includes analysis of several parts of ATV using a suitable analysis software which helps the engineers to predict the possible failures before hand



VIRTUAL DYNAMICS

Virtual Dynamics event is conducted on IPG CAR MAKER software which helps simulating the ATV in an virtual environment

BAJA SAE INDIA

DYNAMIC EVENTS



ENDURANCE

The Endurance Event assesses each vehicle's ability to operate continuously and at speed over rough terrain with obstacles in potentially adverse weather conditions



SLEDGE PULL

The Sledge Pull event is designed to measure the ability to maintain traction while pulling a sledge through a slight gradient



SUSPENSION AND TRACTION

Suspension & Traction event is designed to assess each vehicle's suspension design and traction ability over typical Baja terrain



MANEUVERABILITY

Maneuverability is designed to assess each vehicle's agility and handling ability over off-road terrain. Teams will attempt to maneuver through the course with a minimum time



ROCK CRAWL

Rock Crawl should be exactly as the name describes - an event where the vehicle has to CRAWL over the rocks



ACCELERATION TEST

The Acceleration Test is designed to measure each vehicle's ability to come up to speed quickly from a standing start

ACHIEVEMENTS



TREND SETTER AWARD

BAJA SAEINDIA 2010



GO GREEN AWARD

BAJA SAEINDIA 2012

BEST ENGINEERING DESIGN AWARD

BEST AESTHETICS AWARD

BAJA SAEINDIA 2007



BAJA SAEINDIA 2023

BAJA SAEINDIA 2016

1ST IN ENGINEERING DESIGN AWARD

1ST IN TECHNOLOGY INNOVATION AWARD

BEST 4WD TEAM



MANEUVERABILITY AWARD



**MEGA ATV
CHAMPIONSHIP 2022**



1ST IN ARMAGEDDON RACE

OVERALL 3RD IN CHAMPIONSHIP

SPECIFICATIONS



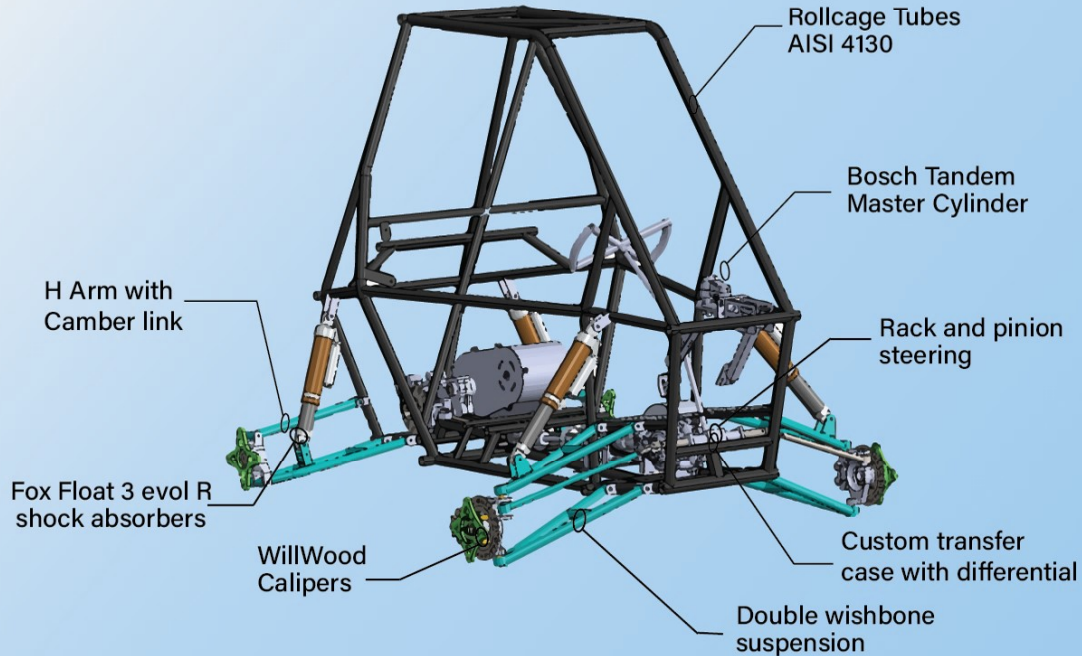
DATA1 6-phase
PMSM



48V, 120Ah LFP
battery



Controller with
in-built inverter



TIMELINE



RECRUITMENT
AND TRAINING

MAR - APRIL



DESIGN AND
ANALYSIS

MAY - JUNE



MATERIAL
PROCUREMENT
AND FABRICATION

JULY - AUGUST



STATIC REPORTS
& EVENT
PREPARATION

SEPT - NOV



ASSEMBLY
AND TESTING

DEC - MARCH

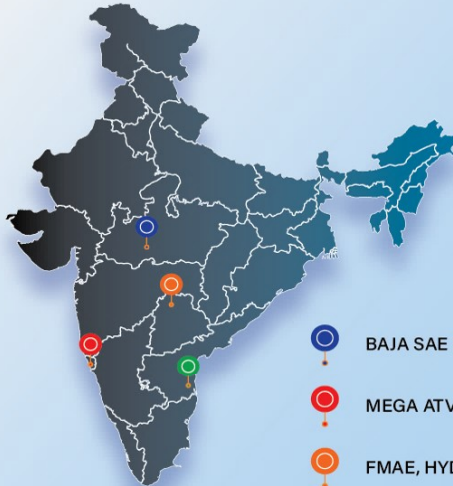


BAJA SAE
INDIA EVENT

APRIL - MAY

OTHER EVENTS

VERTICALS



- BAJA SAE INDIA, PITHAMPUR
- MEGA ATV CHAMPIONSHIP, GOA
- FMAE, HYDERABAD
- ATVC, VIDYANAGAR

VERTICALS

01

ROLL CAGE



02

DRIVETRAIN



03

SUSPENSION



04

STEERING

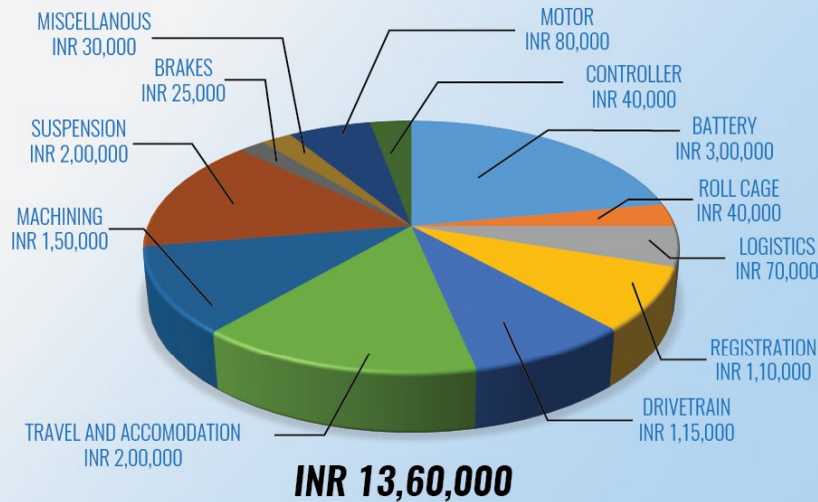


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BRAKES



BUDGET ESTIMATION



> We have left a big legacy in M-Baja over the last 17 years

> We feel it is time to shift to something more challenging

> With EV's gaining popularity, we have decided to compete in eBAJA 2024

WAYS TO SUPPORT US



Monetary support helps us to cover our expenses and in upgrading our ATV



Technical support helps us improve the design and performance of our ATV and clarify our queries in design, manufacturing, etc.



Logistic support helps us in transporting the ATV and tools



Providing products (both hardware and analytic tools) at a discounted price enhances our development



Manufacturing support helps us in machining the components of ATV with high accuracy



Travel support help us in accomodation of our team members near event site

OUR GRATITUDE TOWARDS SPONSORS





18 YEARS
OF
LEGACY