

SPONSORSHIP BROCHURE

2024-'25



FORMULA
MANIPAL

Engineered with Passion

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**SPONSORSHIP
TIERS**



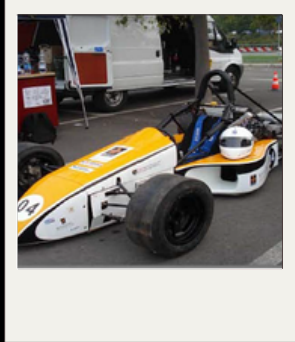


STARTED AS AN ABSTRACT IDEA IN 2007, A GROUP OF STUDENTS FORMED THE MOST POPULAR CHAPTER OF THE FORMULA STUDENT PHENOMENON HERE IN MIT, MANIPAL. WE ARE A PASSIONATE AND DYNAMIC TEAM OF 45 ENGINEERING ENTHUSIASTS, HAILING FROM MANIPAL INSTITUTE OF TECHNOLOGY, DRIVEN BY OUR UNWAVERING LOVE FOR MOTORSPORTS AND TECHNOLOGY. WE CHANNEL OUR CREATIVITY AND TECHNICAL ABILITIES IN CONCEPTUALIZING, DESIGNING, FABRICATING, TESTING AND RACING A FORMULA STYLE, SINGLE SEATER AND OPEN-WHEELED RACE CAR. FORMULA MANIPAL, WHICH HAS PROVED TO BE ONE OF THE GREATEST TECHNICAL WONDERS OF MIT, HAS BEEN IMPROVING BY LEAPS AND BOUNDS BOTH IN TECHNICAL AND NONTECHNICAL ASPECTS.

WITH THE CONSTANT ENCOURAGEMENT AND SUPPORT FROM SPONSORS AND TIMELY GUIDANCE BY THE FACULTY ADVISORS, EVERY YEAR THE TEAM DISPLAYS A SHOW OF EXCELLENCE. THIS YEAR THE OBJECTIVE OF THE TEAM IS TO DESIGN AND MANUFACTURE A HIGH PERFORMANCE ELECTRIC RACECAR.

AS THE WORLD RECOGNIZES THE URGENT NEED TO TRANSITION TOWARDS SUSTAINABLE TRANSPORTATION, FORMULA MANIPAL IS ALIGNING ITSELF WITH EMBRACING ELECTRIC VEHICLES (EVS). RECOGNIZING THAT THE WIDESPREAD ADOPTION OF EVS REQUIRES SIGNIFICANT TECHNOLOGICAL ADVANCEMENTS, WE ARE COMMITTED TO DRIVING INNOVATION IN THIS FIELD. THROUGH RESEARCH, DEVELOPMENT, AND COLLABORATION, WE AIM TO OVERCOME EXISTING CHALLENGES AND PUSH THE BOUNDARIES OF WHAT EV TECHNOLOGY CAN ACHIEVE

A BRIEF HISTORY OF *FORMULA* *MANIPAL*



FM08

Ferrari Fiorano Racetrack,
Italy

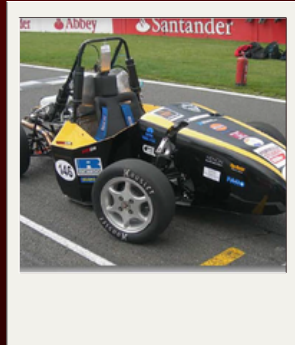
" The Fastest Indian FSAE
Car I have seen "

- Michael Royce (Ex-
Technical Head,
Lamborghini)

FM09

Silverstone F1 Track, U.K
"is the most well engineered
Indian Car I have come across
till date."

-Claude Rouelle (Design Judge
and President of OptimumG



FMX

Wachauring, Melk
Austria

Cost Event - 4
Most Motivated
Team- Award
Received at FS
Austria 2010



FMXI

Autodromo di
Varano Italy
Overall Position -
42





FMX3

Hockenheimring Germany
Autódromo de Most Czech Republic
Cost Event - 4

FMX4

Hockenheimring Germany
Autódromo de Most Czech Republic
Overall Position - 60
Cost Event - 31

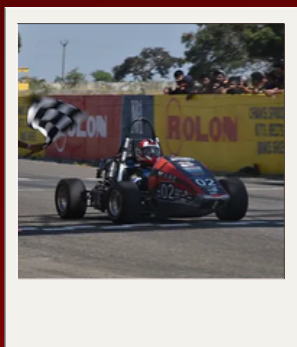


FMX6

Hockenheimring Germany
Autódromo de Most Czech Republic
Kari Motor Speedway India
Overall Position - 9
Cost Event - 5

FMX8

Red Bull Ring, Spielberg Austria
Kari Motor Speedway India
Overall Position - 3
Cost Event - 5 Acceleration - 1
Business Plan - 1 Endurance - 3

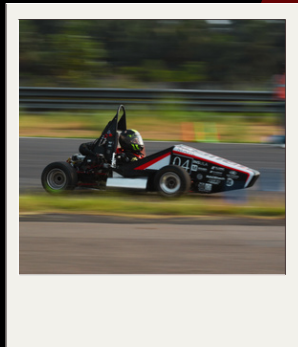
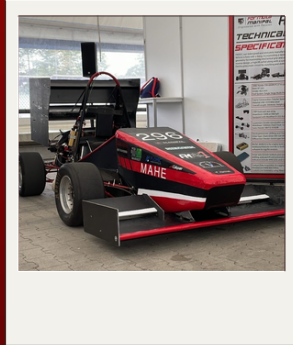


FM20

Kari Motor Speedway India
Overall Position - 8
Autocross - 1

FMXX1

Hockenheimring Germany
Business Plan - 6
Overall Position - 19
Cost Event - 17



FMXX1B

Formula Bharat 2023 at Kari Motor
Speedway, India
Overall Position - 5
Cost Event - 2
Autocross - 3
Acceleration - 4

FM23

Formula Student at Red Bull Ring,
Austria 2023
Overall Position - 12
Cost - 6
Skidpad - 8

Formula Student East at
Hungaroring, Hungary 2023
Overall Position - 14



FM24

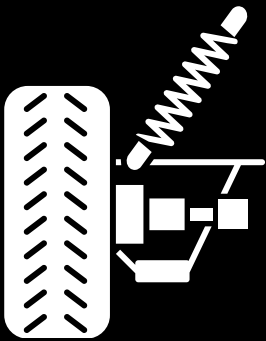
Formula Bharat 2024 at Kari
Motor Speedway, India
Overall Position - 4
overall statics - 2
Cost Event - 1
engineering design - 4
business plan - 4

OUR SUBSYSTEMS



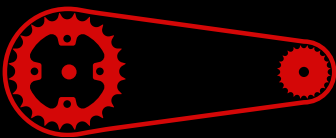
STRUCTURES

THIS TEAM CONCENTRATES ON DESIGNING THE CHASSIS, BODYWORK, FLOOR PAN, FIRE WALL AND OTHER PERIPHERALS SUCH AS THE ROLL BAR PADDING, PUSH BAR, ETC. THIS TEAM AIMS AT COMBINING ENGINEERING PRINCIPLES WITH AESTHETICS TO ATTAIN A VERY FINE BALANCE FOR THE CAR. IT ALSO AIMS TO MAXIMIZE SPACE OPTIMIZATION AND AT THE SAME TIME ENSURES MINIMAL WEIGHT CRITERIA.



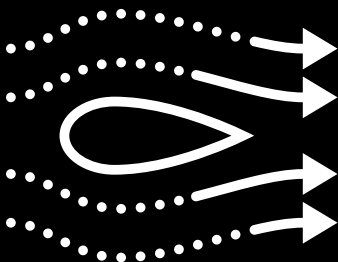
VEHICLE DYNAMICS

THE VEHICLE DYNAMICS TEAM FOCUSES ON DESIGNING THE SUSPENSION GEOMETRY AND STEERING SYSTEM OF THE CAR. THEY ALSO WORK ON THE BRAKE SYSTEM, PEDAL ASSEMBLY AND WHEEL ASSEMBLY TO IMPROVE THE DYNAMIC CAPABILITY OF THE CAR.



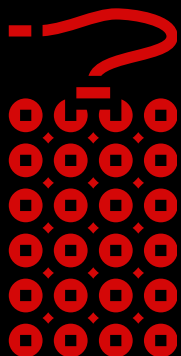
TRANSMISSION

THE TRANSMISSION TEAM FOCUSES ON THE MOST EFFICIENT WAY TO TRANSMIT POWER FROM THE MOTOR TO THE GROUND. WITH THE CUSTOM OPEN DIFFERENTIAL AND DUAL CHAIN DRIVE THEY TRY TO SQUEEZE OUT EVERY DROP OF PERFORMANCE WE CAN FROM THE CAR.



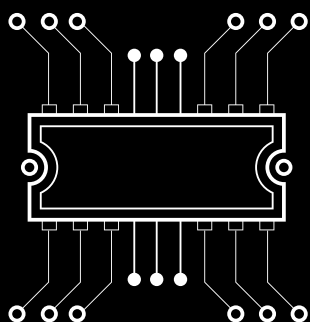
AERODYNAMICS AND COMPOSITES

THIS SUBSYSTEM IS IN CHARGE OF WINGS, BODYWORK, AND THE GENERAL AIRFLOW AROUND THE CAR. THEY FOCUS ON DEVELOPING AN AERODYNAMIC PACKAGE USING CFD SIMULATIONS AND MANUFACTURE THEIR COMPONENTS WITH THE REQUIRED KNOWLEDGE OF COMPOSITE MATERIALS. ADDITIONALLY, IT IS RESPONSIBLE FOR THE COOLING SYSTEM OF THE CAR.



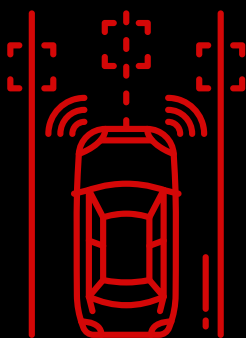
E-POWERTRAIN

THE E-POWERTRAIN TEAM FOCUSES ON DESIGNING AND OPTIMIZING THE BATTERY-PACK, SELECTION OF MOTOR VIA LAP-TIME SIMULATIONS. THEY ALSO DESIGN THE COOLING SYSTEM FOR MOTOR AND MOTOR CONTROLLER.



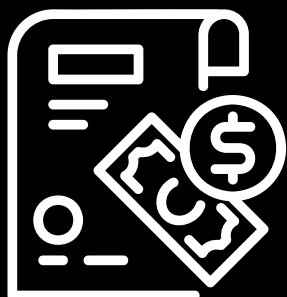
ELECTRONICS AND CONTROLS

THE ELECTRONICS & CONTROLS TEAM FOCUSES ON MANUFACTURING THE WIRING HARNESS AND DEALS WITH DATA ACQUISITION. THE WIRING HARNESS INTERCONNECTS ALL PARTS OF THE CAR TO MAXIMISE PERFORMANCE. THEY WORK CLOSELY WITH THE MOTOR AND MOTOR CONTROLLER TO DEVELOP A RELIABLE POWERTRAIN. THEY ALSO MAKE THE BMS AND DATA ACQUISITION SYSTEM THAT MONITORS THE RUNNING OF THE CAR THROUGH A VAST ARRAY OF SENSORS.



DRIVERLESS

THIS TEAM FOCUSES ON DESIGNING A DRIVERLESS FORMULA STUDENT CAR WHILE DWELLING DEEP INTO THE WORLD OF AUTONOMOUS SYSTEMS AND ADVANCED ROBOTICS. IT AIMS TO PUSH THE LIMITS OF DRIVERLESS VEHICLES BY DEPLOYING VARIOUS ML AND AI ALGORITHMS. IT MAINLY DEALS WITH FOUR IMPORTANT FIELDS - PERCEPTION, SIMULTANEOUS LOCATION AND MAPPING (SLAM), PATH PLANNING AND CONTROLS.



MANAGEMENT

THE MANAGEMENT TEAM DEALS WITH A WIDE RANGE OF SEGMENTS CONSISTING OF FINANCE, LOGISTICS, MEDIA & PR, SPONSORSHIPS AND SOURCING. FINANCE AND LOGISTICS MAINLY INCLUDE MONITORING TRANSACTIONS AND MANAGING DOCUMENTATION, THE MEDIA AND PR SEGMENT INVOLVES GRAPHIC DESIGNING ALONG WITH WEB DEVELOPMENT. IN ADDITION, SPONSORSHIP AND SOURCING MAINLY FOCUS ON BRINGING IN MONETARY AND IN-KIND ASSISTANCE WHILE PROCURING THE PRODUCTS REQUIRED FOR MANUFACTURING.

OUR PROCESS

REVIEW

A COMPLETE ANALYSIS OF LAST YEAR'S PERFORMANCE IS DONE TO BE COGNIZANT OF THE STRENGTHS AND WEAKNESSES OF THE CAR AND THE TEAM. A LIST OF FEATURES OF AN IDEAL CAR AND AN IDEAL TEAM IS COMPILED SO THAT THE DESIGN AND TEAM MANAGEMENT GOALS CAN BE CLEARLY DEFINED.

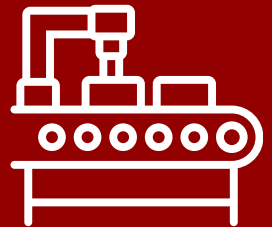


DESIGN

IN OUR INITIAL PHASE, WE SET CLEAR DESIGN GOALS, INCLUDING WEIGHT TARGETS. USING TOP CAD SOFTWARES LIKE CATIA AND FUSION 360, WE CRAFT THE PART PRECISELY. THEN, WITH ANSYS, WE ANALYZE ITS STRUCTURAL AND THERMAL INTEGRITY, MAKING SWIFT ADJUSTMENTS FOR OPTIMAL PERFORMANCE.

MANUFACTURING

WE ENSURE THE DESIGNED PARTS CAN BE MANUFACTURED FEASIBLY, MAKING ANY NECESSARY DESIGN ADJUSTMENTS. ONCE CONFIRMED, WE ESTABLISH THE MANUFACTURING PROCESS. NEXT, WE ASSESS WHETHER THE PARTS CAN BE ASSEMBLED EFFECTIVELY. IF NEEDED, WE MODIFY THE DESIGN FOR BETTER ASSEMBLY, AND THEN ESTABLISH A METHODOLOGY FOR MOUNTING, INCLUDING JIG AND FIXTURE DESIGN, VALIDATED USING CATIA.



TESTING

DURING THOROUGH ON-TRACK TESTING, EACH COMPONENT UNDERGOES RIGOROUS EXAMINATION TO CONFIRM ITS ABILITY TO WITHSTAND ANTICIPATED LOADS AND ENSURE RELIABILITY. WE ASSESS DURABILITY AND RESILIENCE UNDER VARIOUS CONDITIONS, VALIDATING INDIVIDUAL COMPONENT INTEGRITY AND OVERALL VEHICLE FUNCTIONALITY. THIS PROCESS GUARANTEES PERFORMANCE AND SAFETY STANDARDS ON THE TRACK.



RACE

WE ENTER FORMULA STUDENT COMPETITIONS WITH A CLEAR FOCUS: CONQUERING THE ENDURANCE EVENT. THIS PINNACLE CHALLENGE DEMONSTRATES OUR VEHICLE'S RELIABILITY AND ENDURANCE UNDER DEMANDING CONDITIONS. THROUGH METICULOUS PREPARATION AND UNWAVERING DETERMINATION, WE STRIVE TO EXCEL, ESTABLISHING OURSELVES AS FORMIDABLE COMPETITORS IN THE FORMULA STUDENT REALM.



OUR GOALS

BRINGING TOGETHER TALENTED STUDENTS FROM MIT ACROSS A VARIETY OF ENGINEERING DISCIPLINES AND GIVING THEM THE SKILLS, TOOLS, AND CAPITAL TO DO THEIR BEST WORK IN ORDER TO CREATE THE BEST RACE CAR POSSIBLE.

THIS SEASON, OUR GOAL IS TO DEVELOP A HIGH PERFORMANCE EV RACECAR WITH AN INTEGRATED DV COMPONENT AS WELL AS FABRICATE IT WITH THE FOLLOWING FEATURES:

- HIGH RELIABILITY
- SPACE OPTIMIZATION
- GOOD HANDLING
- ERGONOMIC COCKPIT DESIGN
- QUICK AND SPEEDY
- LIGHT WEIGHT (< 220 KGS)
- COST EFFECTIVENESS

TO ACHIEVE THE TECHNICAL BENCHMARKS SET, WE WILL EXECUTE THE FOLLOWING:

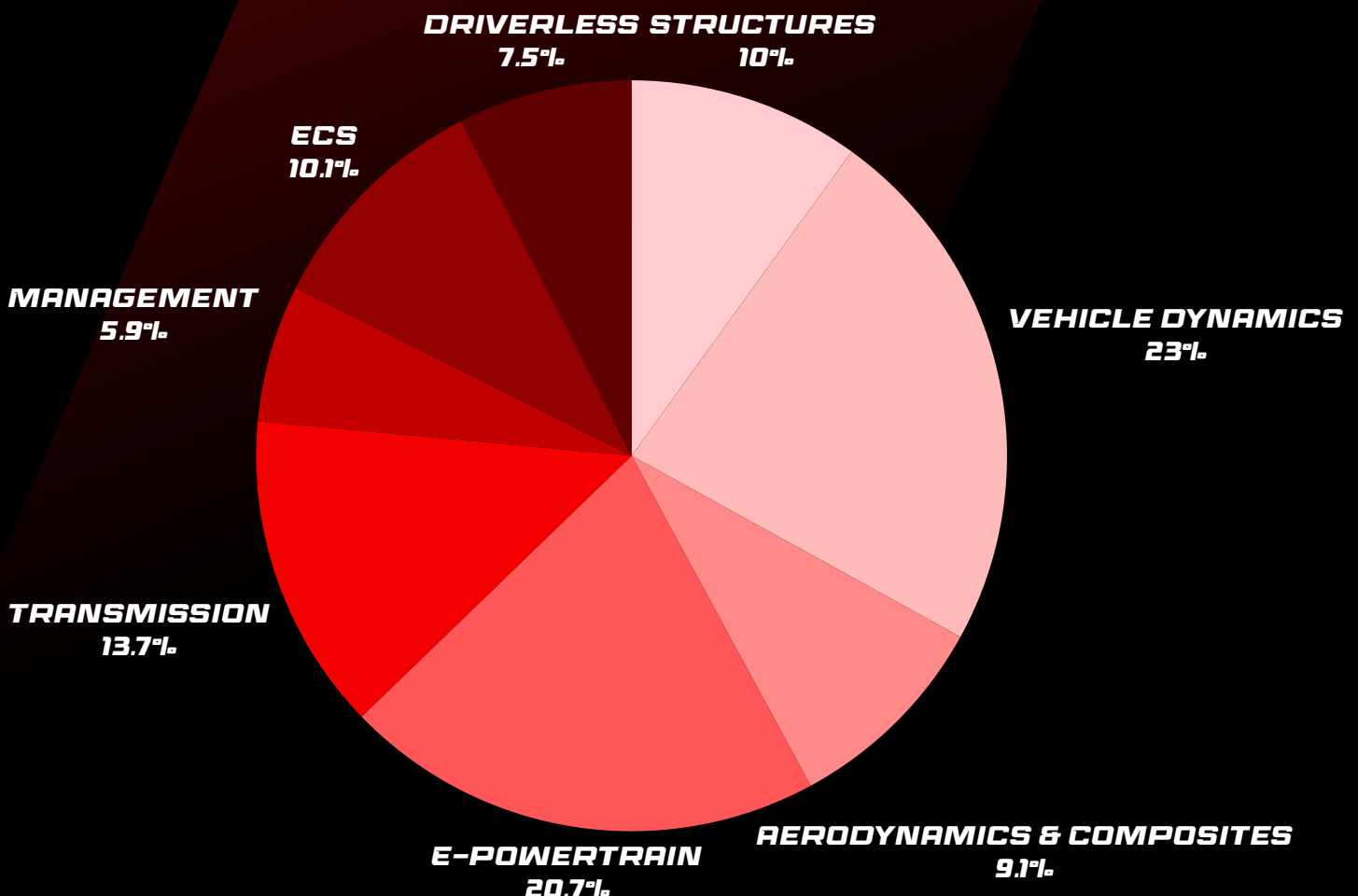
- LIGHT WEIGHT CARBON FIBER COMPONENTS.
- DESIGNING SAFETY CIRCUITS TO MAINTAIN SAFETY OF THE ELECTRICAL SYSTEMS.
- REDUCING UNSPRUNG MASS USING LIGHTWEIGHT COMPONENTS.
- DESIGN HIGHLY OPTIMIZED WIRING HARNESS TO IMPROVE THE RELIABILITY OF THE VEHICLE.
- DESIGN AND MANUFACTURE A STEER BY WIRE SYSTEM FOR DRIVERLESS CONTROL.

OUR MISSION

AT FORMULA MANIPAL, WE EMPHASIZE RIGOROUS ENGINEERING, TECHNICAL EXPERTISE, AND EFFECTIVE MANAGEMENT TO CREATE THE BEST RACE CARS ON A UNIVERSITY LEVEL WITHIN A LIMITED BUDGET. WE ALSO EMPOWER ENGINEERING STUDENTS TO BECOME THE BEST ENGINEERS AND LEADERS THEY CAN BE, EQUIPPED TO DEAL WITH CHALLENGES THAT THE INDUSTRY FACES TODAY AND COME UP WITH INNOVATIVE SOLUTIONS.

ESTIMATED ANNUAL BUDGET : ₹ 38,20,000

EXPENDITURE 2024-25



WHY SPONSOR US?

01

SPONSORING FORMULA MANIPAL MEANS SUPPORTING THE NEXT GENERATION OF INNOVATORS, ENGINEERS, AND PROBLEM SOLVERS. YOUR INVESTMENT DRIVES CUTTING-EDGE AUTOMOTIVE TECHNOLOGY AND FUELS BREAKTHROUGHS THAT EXTEND FAR BEYOND THE RACETRACK.

02

FORMULA MANIPAL'S EVENTS, COMPETITIONS, SOCIAL MEDIA AND PROMOTIONS OFFER UNPARALLELED OPPORTUNITIES TO SHOWCASE YOUR PRODUCTS AND SERVICES TO A DIVERSE AND ENGAGED COMMUNITY OF OTHER FORMULA STUDENT TEAMS BOTH NATIONAL AND INTERNATIONAL, ENGINEERING STUDENTS, ENGINEERS, COMPANY EXECUTIVES ETC.

03

OUR TEAM CONSISTENTLY RANKS AMONG THE TOP PERFORMERS IN NATIONAL COMPETITIONS. BY ASSOCIATING WITH FORMULA MANIPAL'S SUCCESS, YOU CAN DEMONSTRATE YOUR COMMITMENT TO EXCELLENCE AND INNOVATION IN THE FIELDS OF MOTORSPORTS AND ENGINEERING.

04

BY SPONSORING FORMULA MANIPAL, YOU CAN TAP INTO A TALENT PIPELINE OF SOME OF THE BRIGHTEST MINDS IN ENGINEERING AND FORGE CONNECTIONS WITH STUDENTS WHO COULD BECOME FUTURE EMPLOYEES OR COLLABORATORS, ENRICHING YOUR WORKFORCE WITH FRESH PERSPECTIVES.

WE NEED YOUR SUPPORT

WHILE THE INSTITUTE PROVIDES US WITH MONETARY FUNDS AND A WORKSHOP GARAGE WITHIN THE CAMPUS TO BUILD OUR RACE CAR, WE RELY ON FUNDRAISING FROM CORPORATE SPONSORS AND INDIVIDUAL DONORS TO FUND OUR MACHINING, MANUFACTURING, BUYING MATERIALS, TOOLS ETC. WE WELCOME BOTH CASH AND IN-KIND MATERIALS OR EQUIPMENT. FORMULA MANIPAL OFFERS THE FOLLOWING SPONSORSHIP BENEFITS FOR DIFFERENT TIERS OF SPONSORSHIPS. AS AN INTERESTED SPONSOR, WE REQUEST YOU TO LOOK THROUGH THE FOLLOWING SPONSORSHIP SLABS AND FIND YOUR MOST SUITABLE ONE.

SPONSORSHIP TIERS

FEATURES	TITLE	PLATINUM	DIAMOND	GOLD	SILVER	BRONZE	ASSOCIATE
Amount	15,00,000	7,50,000	5,00,000	3,00,000	1,50,000	75,000	30,000
Logo	Extra Large	Large	Large	Medium	Medium	Small	Small
Logo on the car	●	●	●	●	●	●	●
Logo on the newsletter	●	●	●	●	●	●	●
Logo and link on the website	●	●	●	●	●	●	●
Team Apparel for the Sponsor	●	●	●	●	●	●	
Logo space on apparel	●	●	●	●			
Sponsor banner (Sole)	●	●	●				
Presentation/Exhibition	●	●					
Availability of the car for promotion	●						
Exclusive sponsor stall at events	●						

MEDIA COVERAGE



In Austria, MIT geeks race ahead with F1 car
 TNN, New 10, 2010, 10:10pm IST

Tata Airtel makes history: Tata Airtel - India's first 4G LTE network. Tata Airtel Today.

Article Comments
 Page: Manipal Institute Of Technology | Formula Manipal Car

MANIPAL: The 2010 Formula Manipal car, conceptualised, designed and fabricated by a team of over 30 students from the Manipal Institute of Technology (MIT) was launched by Chancellor Ramdas M Pai at the Manipal University building here on Friday.



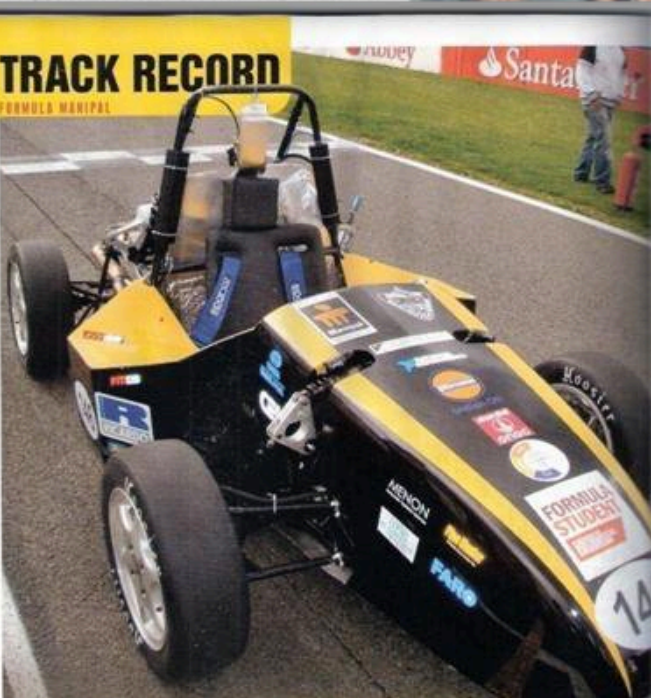
Manipal team makes formula car
 The car took part in the Formula Student 2009 event in U.K.
 Staff Correspondent

MIT STUDENTS HAVE DESIGNED A SINGLE-SEAT RACING CAR

Manipal has a Formula for London design fete

Raguram. MANGALORE

Students of Manipal Institute of Technology (MIT) will virtually blaze a



SILVERSTONED!

STUDENTS. RACING CAR. SILVERSTONE. RESPECT

TEXT AKSHAY SETHI PHOTOS FORMULA MANIPAL

Racing fanatic, that's what we are. A few days back, we got in touch with BMW. We said that we are an Indian racing team and we had something really special in store for them. Was it special enough? Read on! The fanatic, as pointed out above, are - the students of Manipal Institute of Technology and we've just won a three-dimensional prize for

performance, but for cost and safety too. Right, then. A hoarding at the official launch, proudly said, "33 students, seven cars, one car, the Silverstone track." The called Formula Manipal, acronym for the 2009, 2010 and we, the members, are passionate about our nation to the core of our passion, we have a dream car that we've

Techies find the right formula

is made of carbon fibre. The engine puts out 79bhp at 12000 rpm and gives out 57Nm at 8000 rpm. We felt by incorporating pneumatic gears and clutch, we can achieve full acceleration of the engine capacity of the car he said.

The FMX1 is now ready for preliminary testing, while the final testing will be in Hyderabad before

Now, Formula Manipal on the race

DH News Service
 MANIPAL: A 600 cc Formula Race car that will participate in FSAE-2008 in Italy (the first out of Manipal University's workshop, was unveiled by Chancellor Dr Ramdas Pai at the University building premises here on Thursday.
 Manipal University's 600 cc formula race car was designed by the Formula Manipal team comprising the students of mechanical,



engineering students with their formula car.

er fabrication," said Divesh Thani, manager of the team. The car has raced their cars in the Ferrari Fiorano Track (Maranello, Italy) in 2008.

which will participate in the FSAE-2008.

team participating in the event. The team has been followed with the guidance from the Indian ace formula race car driver Narain Karthikeyan.

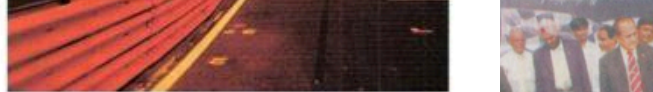
Addressing the media after the unveiling ceremony, Director of MIT Dr S S

Pabla expressed his satisfaction over the successive outcome of the students' endeavour and hoped that the University will participate in more international events in future.

An estimated cost for the manufacturing of the car is

India's lightest FSAE car

110 which was conceptualised, designed and fabricated by the students from the Manipal Institute of Technology



Mani and his team with the Manipal Institute of Technology.

why Formula Student is the pinnacle of student-level motorsports. You're surrounded by German cars made with typical German precision, Italian cars with their beautiful carbon fiber bodies, Austrian cars which look great and go like rockets, and you can't help but feel honoured that you're there. It's about the atmosphere of that place - it's electric. It was an experience that surpassed all our expectations. We'd like to thank our college and our sponsors for all their support, because this wouldn't have been possible without them.

By the way, the team's looking out for sponsors for their 2010 challenger called FM-X. So if any of you think you can spare a penny for this promising young team's efforts, get in touch with them at aditya.agarwal@formulamanipal.com and don't forget to check out their site www.formulamanipal.com

www.silverstone.co.uk



Mani and his team with the Manipal Institute of Technology.

www.silverstone.co.uk

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Thank you
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MANIPAL
ACADEMY of HIGHER EDUCATION
(Institution of Eminence Deemed to be University)



BATEMO
UNDERSTANDING BATTERIES



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microplacer
India's Leading Product Technology Company



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ENGINEERING



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