FORMULA STUDENT
Institution of Mechanical Engineers

I MECH E
FORMULA STUDENT

Congratulations to the **Indian Institute of Technology Delhi**

FOR PARTICIPATING IN **FORMULA STUDENT 2008**

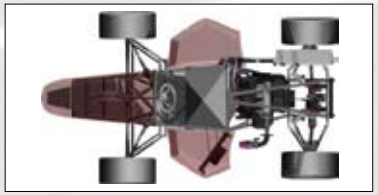
The AXLR8R is a multidisciplinary team comprising of undergraduate and postgraduate students from different disciplines and from different years. Because of the high academic pressure and the strict discipline requirements, the team members generally spend their day hours at the institute and work on the project in the late hours of the evening or night. Their dedication and devotion for the team always keeps them motivated.

Last year IIT-Delhi team participated for the first time in FSAE West at California speedway. The project taught them the basics of engineering: to study a given problem and then find its solution by applying basic science and technology. They have also learned to work in a team. The team has grown into family now and they all hold the common aim to make a number one Formula Student car.

Studying design from the top teams, manoeuvrability was given preference over engine performance. Hence criteria such as less weight, compactness, low ride height and strength are considered as guiding performance parameters. Safety, reliability, cost, simplicity in design and ease of manufacture all guided the final design.

Considering the immense amount of learning and pleasure, most of the components were self-designed and self-manufactured.

First time at FS UK



Length/width/height/wheelbase
2480mm/1400mm/1100mm/1560mm

Track (front/rear)
1250mm/1150mm

Weight including 68kg driver (front/rear)
126kg/154kg

Suspension (front/rear)
Unequal length A-Arms. Push rod actuated Fox Vanilla RC spring/damper units

Tyres (front/rear)
Goodyear D2692 20.0x7.0 – 13 R 075

Wheels (front/rear)
Alloy 13" x 6" – 46mm offset

Brakes (front/rear)
1040 steel, hub mounted, 242mm diameter/1040 steel, differential mounted, 276mm diameter

Frame type
Welded Steel tube space frame, ASTM A 179 mild steel tube (Equivalent to MS1010)

Engine
Honda CBR F4i/2002

Bore/stroke/cylinders/cc
67.0 x 42.5 mm/4 cylinder/599 cc

Fuel
Gasoline

Fuel system
CBR F4i stock Fuel injectors

Max power/max torque
12,000rpm/9,000rpm

Transmission/differential/final drive
Chain 530 pitch/JTEKT Torsen University special #012000
Bias ratio 2.6:1/3.636