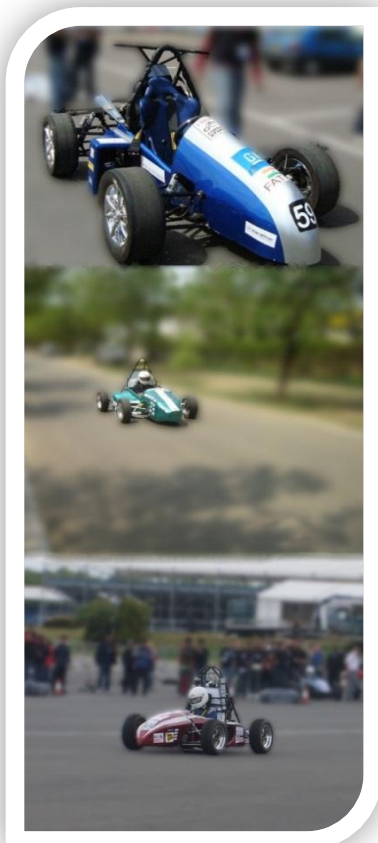


HISTORY

Team Fateh has had a storied and successful history in the annual FSAE competition. We began competing at the 2008 event, where we enjoyed a 10th place finish in Cost judging Event. The exemplary design and the extraordinary performance of the car has attributed to the latest software's which have made it possible to design the most intricate detail with precision. Team Fateh is a group of undergraduate engineers who are eager to learn new skills and ideas. While our objectives may seem lofty for an extracurricular activity, the organisation, knowledge and team work crafted from success and failure of the competition is exhaustive.



ACHIEVEMENTS

We are getting closer every year thanks to continual support from our sponsors and many hours dedication from our team members. As always, we look back on this past year with great pride and look forward to future successes.

- **BEST INDIAN TEAM IN 2009 AND 2010**
- **ONLY INDIAN TEAM TO COMPLETE ENDURANCE TEST SUCCESSFULLY FOR TWO CONSECUTIVE YEARS.**
- **RANKED 30TH IN COST REPORT IN 2010**
- **OVERALL RANK 60 OUT OF 100+ TEAMS IN 2010**
- ***BEST ENDEAVOUR AWARD IN 2008***
- ***RANKED FIRST IN FUEL ECONOMY IN 2008***

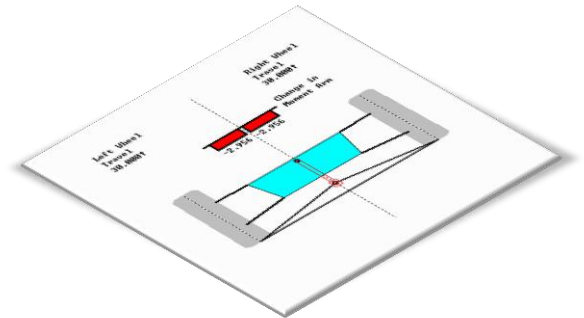
Highlights 2010

Suspension

Analyzing tire data to optimize the best tire combination for 2010 car.

Matlab, Optimum T were used to plot 3D graphs to compare various makes for maximum acceleration and minimizing lateral braking and acceleration load transfers.

Wingeco 3.0 was used to decide geometry of suspension, lateral load transfer, roll center migration both vertical and horizontal, bumper and steering geometry.



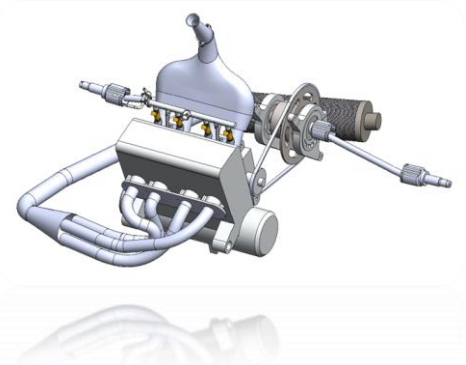
Suspension Design Wingeco



Suspension Assembly

Engine

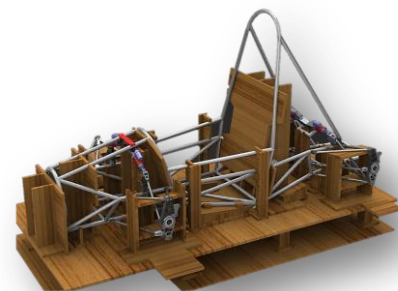
600 cc Kawasaki Ninja ZX6 carbureted engine converted to MPFI, Intake manifold constructed with Rapid Prototyping with direct injection into manifold runners. Flow analyses were performed on Fluent.



Engine Assembly

Chassis

Mildsteel tubular cage designed on **Solidworks** to resist torsion. Structure was designed such that max rigidity, space utilization and weight advantage can be achieved.



Chassis On Fixture

Future Scope

Data Acquisition system Introduction.

Ricardo Wave designing for 2011 Engine.

Pneumatic Gear Shifters Implementation.

Aluminum 7075 machined hubs.

Chromoly Wishbones for weight reduction.