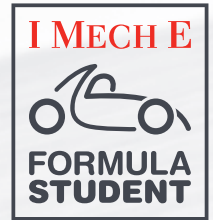


FORMULA STUDENT

Institution of Mechanical Engineers



Congratulations to the Università di Modena e Reggio Emilia

FOR PARTICIPATING IN FORMULA STUDENT 2008

The MMR racing team from the University of Modena and Reggio Emilia has been competing in Formula Student since 2004, obtaining the best results in 2006 finishing second in Class 1/200 and 15th in Class 1.

In 2007, despite an almost complete change of members, the team participated in class 1/200 scoring a good fourth overall and, more importantly, recovering the old team spirit.

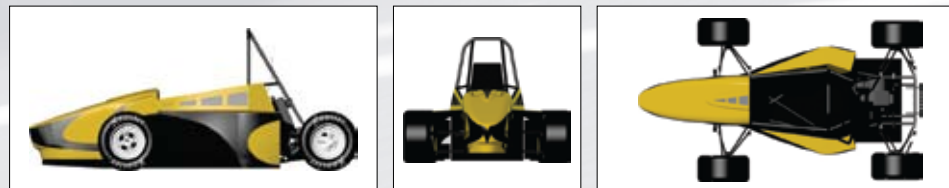
This year the team participates with M08_S, the first brand new car from the second generation of students. The selected engine is derived from the Yamaha XT660 R motorbike, abandoning the team tradition of Husqvarna engines, but not the single cylinder configuration, which is, in our opinion, the best trade-off among several conflicting issues.

In comparison to the past, the design process has been approached in a different way, with a more extensive use of CAD-CAE tools and a stronger effort to integrate the contribution of each member, so that we believe the final result is something more than the sum of the parts.

The main guideline of the project has been to design an easy-to-drive and reliable car, adopting cost-effective solutions but spending time to optimise each individual component.



9th
overall in
Class 1



Length/width/height/wheelbase
2528mm/1428mm/1085mm/1541mm

Track (front/rear)
1210mm /1200mm

Weight including 68kg driver (front/rear)
106.5kg/191kg (full wet car weight of 207.5kg)

Suspension (front/rear)
Unequal length A-Arms. Pull rod actuated Marzocchi spring/damper vertically oriented

Tyres (front/rear)
18x6 - R10 Hoosier

Wheels (front/rear)
Ghipard 7 inch wide, 3 pc Al Rim

Brakes (front/rear)
Steel, hub mounted, 190mm dia/160mm dia. 3.5 mm thickness.

Frame type
Steel tube space frame, 25CrMo4 steel round tubing

Engine
2008 Yamaha XT660 R student modified

Bore/stroke/cylinders/cc
100.0 x 76.0 mm/1 cylinder / 597 cc

Fuel
98 octane petrol (Shell Optimax)

Fuel system
Student designed/built fuel injection system using EFI ECU

Max power/max torque
7,500rpm/3,000rpm

Transmission/differential/final drive
Chain D.I.D. 520 DS -5/8"X 1/4" / Variable limited slip ZF type. Bias ratio 1.7:1/Adjustable between 2.27-2.85 by sprocket changes. Using 2.53