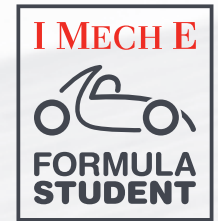


FORMULA STUDENT

Institution of Mechanical Engineers



Congratulations to Yeungnam University

FOR PARTICIPATING IN FORMULA STUDENT 2008

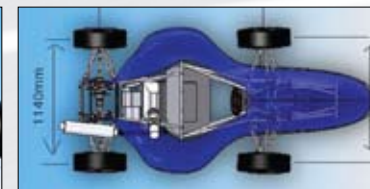
YUSAE (Yeungnam University Society of Automotive Engineers) is competing in Formula Student for the third time. Even if we don't get a good score, our passion is the best in the world.

Our vehicle concept is light. In 2007 our Formula Student vehicle weight was 246kg, but the 2008 vehicle weight has been reduced. Although we wanted to reduce the frame weight we had to consider safety. The structure and choice of material was therefore important. We also wanted to consider the position of the driver.

To control performance we have decided to use a motec ECU for the first time. Our engine is the SUZUKI GSR600. We chose this 600c engine because rpm and torque are the most important.

Our aim is to finish third in one event and to be within the top ten overall. We have not only tried to develop our previous cars but have worked on driver training skills.

Lastly, we are looking forward to the competition and we hope to learn from advantage other team's skills.



Length/width/height/wheelbase
2900mm/1150mm/1250mm/1590mm

Track (front/rear)
1160mm/1140mm

Weight including 68kg driver (front/rear)
181.28kg/190.72kg

Suspension (front/rear)
Unequal length & Non-parallel A-Arms.
Push rod actuated X-Fusion Vector DH1
spring/damper units

Tyres (front/rear)
20x6-13" K40 KUMHO

Wheels (front/rear)
Douglas alloy 13" x 6J +25mm offset,
4mm thick 6061 aluminium

Brakes (front/rear)
Daelim Motors Forte Front Brake Disk,
hub mounted, 220mm dia./Student
designed, laser cut and ground from
STS410, SM45C, 220mm dia.

Frame type
Steel tube space frame with glued carbon
fibre floor panels, STK 500 Structure
Carbon Steel – cold drawn electric
resistance welding

Engine
Suzuki GSR600

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

Fuel
98 octane petrol (Shell Optimax)

Fuel system
Suzuki designed/built fuel injection
system using Suzuki ECU

Max power/max torque
12,000rpm/9,600rpm

Transmission/differential/final drive
Chain 525/LSD (Honda FCCTRAC)/4.19:1