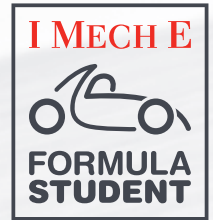


FORMULA STUDENT

Institution of Mechanical Engineers



Congratulations to Aalborg University

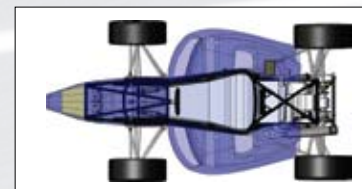
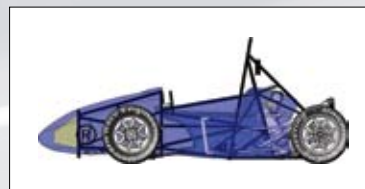
FOR PARTICIPATING IN FORMULA STUDENT 2008

Unicorn Race Engineering comes from Aalborg University and is one of only two Danish teams. The team consists of 16 members primarily studying mechanical engineering.

Members of the team are motivated to compete, first of all, because of the race theme, but also for the chance to put theory to the test. The main objective for this team is therefore to learn about the many aspects of race engineering and to combine it with the different studies of interest for each member.

The development of the Unicorn G3 car is based entirely on students dedicating all their spare time beside their studies. This means that all knowledge accumulated on the team is shared by students, and senior team members pass this knowledge on to new ones taking part in the team.

The main design objective of this car has been to ease the production cost and time. This has been carried out from the beginning of the design process until the end of the production of the car e.g. standardising production processes and cost-effective optimisation.



Length/width/height/wheelbase
2689mm/1427mm/1090mm/1644mm

Track (front/rear)
1200mm/1156mm

Weight including 68kg driver (front/rear)
140kg/165kg (full wet car weight of 305kg)

Suspension (front/rear)
Double unequal length A-Arms.
Pull rod actuated horizontally oriented spring and damper

Tyres (front/rear)
205x55 R13, Avon A54/235x50 R13 A54

Wheels (front/rear)
6.5x13, 40mm/7.0x13, 32mm offset, 3 pc Al Rim

Brakes (front/rear)
Solid hub mounted, 230mm outer diam., 152mm/174mm inner diam., vented

Frame type
Tubular space frame/Semistress engine, S235JR mild steel tube – cold drawn seamless

Engine
2006 Honda CBR 600RR

Bore/stroke/cylinders/cc
67.0 x 43 mm/4 cylinder/599 cc

Fuel
98 octane petrol (Shell Optimax)

Fuel system
Student design/built, fuel injection, sequential

Max power/max torque
10,500rpm/6,500rpm

Transmission/differential/final drive
Chain #520 / Torsen University special (modified)/2.8