

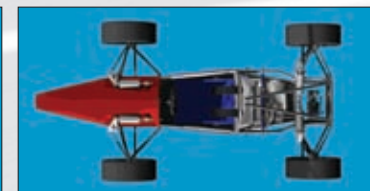
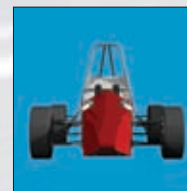
# Congratulations to the University of Surrey

FOR PARTICIPATING IN FORMULA STUDENT 2008

The University of Surrey is entering its second Formula Student Competition. Following on from its first entry in 2006, the team decided to change its main objective concerning the aerodynamics instead looking at detailed research into maximising vehicle dynamics through improvement of the stiffness to weight ratio of the chassis and suspension kinematical analysis.

The team has several research tools at its disposal, but were keen to test, modify and develop the vehicle dynamics on a 'live' running vehicle. As a consequence, a full set of sensors have been placed on the vehicle to monitor several key parameters. As a result the 2008 car serves as a research aid helping us achieve optimised vehicle dynamics for the 2009 vehicle, as well as providing a significant platform for the future team to develop the current design in terms of chassis and engine performance.

Thanks to the dedicated efforts of the team's six members, the car was built to Class 2 requirements ahead of schedule. Consequently the vehicle now exceeds the Class 2 requirements and meets almost all the conditions to satisfy a Class 1 entry. With the incredible progress achieved by such a small group this year, the University of Surrey team is looking forward to a highly productive year developing a competitive 2009 vehicle.



<b>Length/width/height/wheelbase</b>
2680mm/1420mm/1270mm/1700mm
<b>Track (front/rear)</b>
1260mm/1210mm
<b>Weight including 68kg driver (front/rear)</b>
146kg/210kg
<b>Suspension (front/rear)</b>
Unequal length A-Arms. Push rod + Rocker actuated Hagon spring/damper units
<b>Tyres (front/rear)</b>
20x6.5 - 13 R065 Goodyear
<b>Wheels (front/rear)</b>
Keizer alloy 13" x 150mm - 37mm offset, 7mm thick 6061 aluminium
<b>Brakes (front/rear)</b>
AP Racing 258mm
<b>Frame type</b>
Steel tube space frame with bolted aluminium floor panels, FS Compliant Mild steel tube - cold drawn seamless
<b>Engine</b>
1997 Honda CBR 600
<b>Bore/stroke/cylinders/cc</b>
65.0 x 45.2mm/4 cylinder/600 cc
<b>Fuel</b>
98 octane petrol (Shell Optimax)
<b>Fuel system</b>
Stock
<b>Max power/max torque</b>
12,000rpm/10,100rpm
<b>Transmission/differential/final drive</b>
Chain #520/Quaife Ford Fiesta ATB/ Adjustable between 3.15 - 3.77 by sprocket changes. Using 3.77