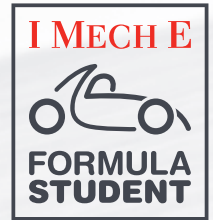


## FORMULA STUDENT

Institution of Mechanical Engineers



# Congratulations to Berufsakademie Ravensburg

FOR PARTICIPATING IN FORMULA STUDENT 2008

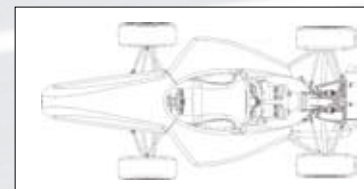
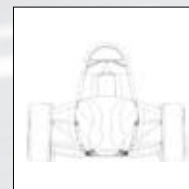
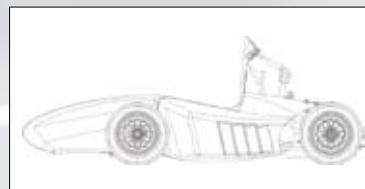
The BART08 is the third race car designed and manufactured by the BA Racing Team from Ravensburg. By combining the manpower of 42 enthusiastic students and the supportive commitment of sponsors we were able to successfully take the challenge of building our very own race car in as little as nine months

History has shown that testing knowledge and reliable driving skills can be the edge for the win so last year's already very busy time schedule was tightened again, in order to hit the track long before the events.

After the dynamic appearance of the car's body shell, the most eye-catching feature is the shiny aluminium rear frame which is connected to the load bearing engine.

In order to lose plenty of weight, carbon fibre was used consistently throughout the whole package. The car's ambitious electronics include electro-pneumatic shifting, a multifunctional steering wheel as well as real-time car data acquisition via WLAN to evaluate our car's performance. All the electronic control units have been designed, produced and programmed by the team so as to achieve maximum versatility.

Considering the car's capabilities it's now up to our driver to finish in the top 10.



**Length/width/height/wheelbase**  
2812mm/1431mm/1081mm/1600mm

**Track (front/rear)**  
1200mm/1100mm

**Weight including 68kg driver (front/rear)**  
149kg/156kg

**Suspension (front/rear)**  
Double unequal length wishbones, pull rod/push rod

**Tyres (front/rear)**  
Hoosier 20.5x7.0-13, 7 inch rim

**Wheels (front/rear)**  
BBS rims and custom design wheel-centers

**Brakes (front/rear)**  
TRW Lucas MST 240 RAC alien design brake discs with 200 mm inner and 240 mm outer diameter/"Braking" alien design brake discs with 180 inner and 220mm outer diameter

**Frame type**  
Steel tube space frame with alucore floor panels/aluminium plate rear structure, 1.4841 (X15CrNiSi25-20) stainless alloyed steel/ENAW 6082 (AlMgSi1) T651

**Engine**  
2003 Yamaha YZF R6 inline four cylinder

**Bore/stroke/cylinders/cc**  
65.5 x 44.5 mm/4 cylinder / 600 cc

**Fuel**  
98 octane petrol (Shell Optimax)

**Fuel system**  
R6 Standard

**Max power/max torque**  
10,200rpm/6,200rpm

**Transmission/differential/final drive**  
Chain Drive/Multi-Disc-Differential, Drexler Motorsports/Adjustable between 3.4-3.9 by sprocket changes. Using 3,6