

Racing News

Nelson Mandela Metropolitan University

Volume 2, Issue 1

Official publication of the NMMU Racing Formula Student Team

for tomorrow

Formula Student

- International student design competition
- Design, build and race single seater Formula 1 style car
- 600cc motor cycle engine with intake restrictor
- Competition judging criteria includes design quality, costing, static and dynamic tests culminating with an endurance race
- Students from a variety of disciplines involved including engineering, marketing, business, IT, finance etc.
- Funding mainly through industry sponsorships
- NMMU plans to compete in an international Formula Student competition.



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New NMMU Racing Recruits

2010 saw NMMU Racing embark on a significant recruitment drive, targeting students on all levels from engineering, business and graphic arts among others. Students were invited to an initial "Launch Event" where the project was presented, and the benefits of participating in this exciting project were explained by the

current team members.

February 2010

Those who indicated an interest in getting involved were then invited to our orientation event, where they were taken on a tour of our facilities, shown all the current CAD designs and treated to a braai for some social time together. We are very encouraged by the enthusiasm that our new recruits are displaying, some of whom have racing experience under their belts!



New recruits pose with the plastic mock-up of the vehicle frame during orientation.



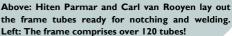
This is the Honda CBR600 engine ready for testing on our engine dynamometer.

Unfortunately, we also had to say good-bye to some of our senior students who have moved on to new challenges in their careers. Hiten Parmar was hired by VW Racing, one of our key sponsors, to assist in their electrical department, while Hinrich Kritzinger joined HiTech Automotive where the bodywork for SA's new electric vehicle, the Joule is under development. Michael Walton, our resident graphic artist, moved on to start his own graphic arts business and Shana Paxton, our photographer, moved on to Cape Town.

Frame Manufacture Under Way

Carl van Rooyen has been working feverishly at the VW Racing workshop in Uitenhage, cutting tubing and building the jigs that will hold the vehicle frame together during welding. VW Racing is supplying all the materials for the frame and suspension, excluding bought-out components such as shock absorbers and bearings. After cutting all the tubes to length, the ends need to be "notched" in order to fit together, due to their circular cross-section.







CONTACTS

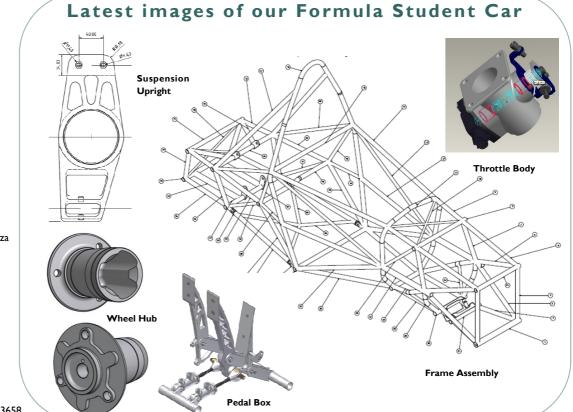
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Team Leaders:

Frame & Body Carl van Rooyen **Engine & Electronics** Andre Labuschagne Suspension & Brakes **Zerwick Kruger** Drivetrain **Shaun Pretorius Business & Marketing Peter Johnson** Formula Student Office: 041-504 3658



NMMU Racing Sponsors and Supporters

- VW Racing: technical support and racing vehicle components
- Continental Tyres: racing tyres
- **ZF Sachs:** shock absorbers
- General Motors: test facility use
- FI Outdoor Karting: race track use and driver training
- Terry Moss Racing: technical and racing support from Terry Moss and Michael Stephen
- Autograph Racing: Diktator engine ECU
- Honda Wing Port Elizabeth: Technical support
- Specialist Composites: Technical support
- DAAD: German student exchange funding
- AIDC: financial support
- NRF: research funding











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VOLKSWAGEN ARacing





Automotive Industry Development Centre

Frame Manufacture Under Way (continued)

machined - Diktator ECU There are also many components, which need to manufactured, such as the suspension hubs - 4 x Willwood brake callipers and uprights, differential mountings and - 4 x 13" BBS racing wheels throttle body. We are finalising all of our - 16 x Continental racing tyres working drawings to have these - I x Momo steering wheel manufactured.

The list of components purchased is growing daily and now includes:

- 2 x Honda CBR600 engines
- Drexler limited-slip differential
- 2 x radiators

- be 4 x ZF Sachs shock absorbers

 - I x Formula VW steering rack
 - Various electrical sensors
 - Festo electo-pneumatic components for gearshift control
 - Motec in-vehicle data logger and display

January saw the registration for the Formula

Student Germany event which is held in August this year, but due to the incredible popularity of the event, we were unable to secure a full entry position, and were placed on the waiting list.

We are currently investigating the possibility of participating in an alternative competition, either in Europe or Australia, if we are not allowed to compete in Germany.

The vehicle's frame should be built by the end of March, with a running vehicle targeted for mid-year.