2009 Sasol Baja SAE Challenge

The Sasol Baja Society of Automotive Engineers (SAE) Challenge (formerly known as the Sasol Mini Baja) took part at the Gerotek testing facilities on 16 and 17 October 2009.

The Baja Challenge requires engineering students to design and build off-road buggies that have to undergo static evaluation and other tests, and that have to withstand a four-hour endurance race on a challenging dirt track. The vehicles are built according to a strict set of design rules, and all competitors receive a 7.5 kW engine supplied by Briggs and Stratton. This event has taken place every year for the past 14 years, with the sponsorship of Sasol.

The purpose of the Baja Challenge is to serve as a real-life engineering lesson to students studying that subject, and to popularise the engineering sector. A hundred and fifty schoolchildren were invited to attend the event to give them a taste of what engineering is all about and to experience a little bit of this exciting potential career path.

This year, 22 teams from universities around South Africa and one from Manipal University in India entered the challenge. However, many of them failed the static evaluation and other tests, and were not cleared to race.

The team from the University of Pretoria came first in the static and design evaluation, but ended in twelfth place in the endurance race. This resulted in them finishing in seventh place overall. The overall winner was car number 2 of the Tshwane University of Technology, with car number 8 of the Cape Peninsula University as runner-up and car number 11 of the Tshwane University of Technology in third place.

The race was particularly challenging this year. Several cars experienced huge problems with the first water obstacle, which was knee-high.

Just as competitors got used to dealing with the severe dust, a rainstorm turned it all into mud. Furthermore, the circuit was exceptionally rough, and many teams lost their wheels.

Sasol Baja organiser and mentor, Prof Schalk Els of the University of Pretoria, concluded: “This year was a very tough event from a number of angles, not least of which was the weather! But that is what makes this event so important. It would be no use giving these students something easy to do. They need to learn engineering’s hard lessons in a very real and often very difficult environment, and that is exactly what happened today.”

The Baja competition originated at the University of South Carolina in the United States in 1976 and is sanctioned by the SAE. The local version was initiated in 1996, and it has become an important and prestigious competition for engineering design students to win.

→ Although the University's team came first in the static and design evaluation, they ended in 7th place overall.