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## Formula Student at a Glance

It always sounds like a racing series, but it is actually a student competition that challenges many different disciplines, not just engineering. Be it construction, testing, prototype production, project management, marketing or finance. And this is precisely what makes this unique competition, which has since been held worldwide, so fascinating, although in the end “driving fast” is of course the most important thing. In 2006, the Formula Student competition took place for the first time in Germany at the Hockenheimring, organized by the VDI (and here Mr. Ludwig Vollrath, the “father” of the Formula Student in Germany, should be mentioned).

Just two things on the regulations: Defined in the USA around 1980, it is still largely valid today. It leaves an enormous amount of freedom in comparison to “real” racing series and nevertheless ensures balanced odds. Of course there have been and still are modifications, but these are more optimizations than fundamental changes. Where do you still find that today? There are now two offshoots of the classic Formula Student with combustion engine (FSC): Formula Student Electric (FSE) and Formula Student Driverless (FSD). Both with almost the same regulations, so that the FSC and FSE vehicles can drive in the same competition and the FSD can use the previous year’s FSE cars.

A small anecdote about how visionary the rule inventors were in 1980: The more or less all decisive long-distance competition was then, and still is today, defined as a length of 22 km with a

driver change after 11 km. If the fathers of Formula SAE had defined a track length of 40 km instead, no FSE vehicle would drive at racing speeds today because so much battery capacity could not be accommodated in the small monoposts. With a track length of 22 km, a sophisticated battery management and optimal brake energy recovery with four-wheel drive, it is possible for them to stand up to the CEs. Ingenious, isn’t it?

Last but not least, the people who make the Formula Student so unique and unmistakable should be mentioned. Be it the students, who compete here in the fairest possible way and are truly committed, regardless of the amount of time they spend, who celebrate victories and suffer defeats, and are rewarded with the best career prospects. Be it the universities and colleges that offer support where they can and now also see Formula Student as an advertising medium. Be it the VDI as organizer in Hockenheim with its committed employees. Be it the many supporters without whom these technical masterpieces could not be created by students – and here in particular there are many individual people who often help, manufacture and support with all kinds of know-how after work. And of course the sponsors, who not only make sure that there are a lot of stickers on the vehicles, but also that the budget of the teams is right and that Hockenheim can take place every year. Finally, the spectators, parents, friends who simply give their all. Come to Hockenheim next year and experience it. It is unique and incredibly enriching!