



in Schools

George Poulter

KEY FACTS

Current role: Mechanical Structural Analysis Engineer

Company: Mercedes-AMG PETRONAS F1 Team

Country: F1® in Schools UK

Years competing: 2013

School: Bradfield School

Now working for Mercedes-AMG PETRONAS F1 Team as a Mechanical Structural Analysis Engineer, George's role sees him leverage engineering theory and computer modelling to ensure the structural reliability, safety, and optimum performance of mechanical components, with a primary focus on suspension systems. Playing a key role in sparking his enduring passion for engineering, in this case study George discusses how his journey began with F1 in Schools, taking him on a career path that has led to his dream role within F1.

CASE STUDY



F1 in Schools UK National Finals 2013

AN EDUCATION IN ENGINEERING

“My introduction to F1 in Schools coincided with my pursuit of an Engineering GCSE. I was drawn to the competition due to my pre-existing passion for Motorsport, and the project looked very appealing - covering the full product life cycle, from design through to manufacture, testing and racing.

As a team, we soon built up an appetite to put in the extra effort. We regularly stayed after school with the help of our teachers to get the cars built in time for the competition.”

CONCEPTS BECOME PRODUCTS

“We were fortunate to have a well-established Technology department at our school, providing us with valuable opportunities to explore a diverse range of CNC and manual machinery, including milling machines and lathes. We also had access to equipment such as laser cutters and some of the first desktop 3D printers which added an exciting dimension to our hands-on experience. I thoroughly enjoyed the dynamic environment that fostered creativity and innovation, turning classroom concepts into tangible products.

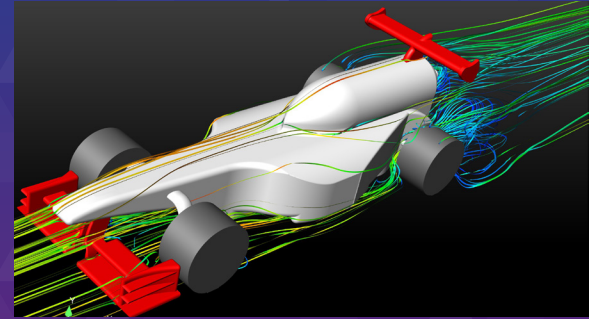
Alongside the actual production of the car, we also had to learn how to fund the project through reaching out to local companies for sponsorship, setting a budget and sticking to it.

Representing Bradfield School in Sheffield, our team, aptly named Steel City Racing, achieved notable success through the 2013 season, becoming the Yorkshire & Humberside Regional Champions, as well as winning awards for Fastest Car and Best Engineered Car. From there, we secured a place at the UK National Finals, where we won Best Pit Display.”

THE JOURNEY TO F1®

“The project ignited my interest in pursuing a career in Engineering. After completing my GCSEs, I secured some short work experiences at Jaguar Land Rover and Aston Martin. I continued with my academic studies at Sixth Form, culminating in a Master’s degree in Mechanical Engineering at the University of Sheffield. Here, I took part in Formula Student where I took on a variety of leading, design and secondary roles.

These variety of experiences were key to me securing a year in industry with Williams Racing as a Junior Design Engineer during my university studies. Post-graduation, I returned to Williams as a Structural Engineer for a year, before moving over to Mercedes-AMG PETRONAS F1 Team, where I have now been for one and half years.”



CFD analysis of Steel City Racing’s car



George at work at Mercedes-AMG PETRONAS F1 Team

“ *The competition is a unique platform for developing young people.*

As a 15-year-old, F1 in Schools was probably my first opportunity to work in a team on a relatively complex project. This exposed me to the importance of teamwork, communication and planning - something which is fundamental in the high-performance environment I currently navigate. ”

CASE STUDY