CHANGING LIVES AROUND THE WORLD

THE FORMULA 1® TECHNOLOGY CHALLENGE

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WELCOME TO THE WORLD OF F1® IN SCHOOLS

We are now in our 16th year of operation and this amazing challenge has grown around the world – operating now in over 44 countries.

Offering a way to learn Science, Technology, Engineering and Maths (STEM) related subjects in such an exciting way is achieving great results and we know we are increasing the intake of students into Engineering careers.

We are privileged to have the support of the Formula 1 community – in particular Mr. Ecclestone at Formula One Management and, of course, the Formula 1 teams who make our students welcome in the F1 Paddock and in their factories.

There are many success stories of students who have actually come through our initiative and have gone on to achieve significant outcomes in their lives including positions in Formula 1 teams.

As F1® in Schools moves into the future we will continue to expand into more and more countries.

This is the largest and most successful school based STEM program in the world and we will continue to grow on our success.

We have many exciting plans for the future!

ANDREW DENFORD
Founder and Chairman, F1® in Schools

WELCOME

Andrew Denford
Founder and Chairman, F1® in Schools
You are a Formula 1® team commissioned to design, construct and race the fastest Formula 1® Car of the Future, powered by compressed air cylinders.

The Competition
What’s it all about?

1 - FORM AN F1® TEAM
Form a team of 3 - 6 students, think of a name, decide job roles; Team Manager, Manufacturing Engineer, Design Engineer, Graphic Designer and Resource Manager. Now register for regional finals.

2 - BUSINESS AND SPONSORSHIP PLAN
Prepare a business plan, develop a budget and raise sponsorship. Teams are encouraged to collaborate with industry and create business links.

3 - DESIGN
Using 3D CAD (Computer Aided Design) software, the team designs an F1 car of the future to the specification set by the International Rules Committee, just like in Formula 1.

4 - ANALYSE
Aerodynamics are analysed for drag coefficient in a Virtual Reality Wind Tunnel using Computational Fluid Dynamics Software (CFD).

5 - MAKE
Using 3D CAM (Computer Aided Manufacture) software, the team evaluates the most efficient machining strategy to make the car.

6 - TEST
Aerodynamics are tested in wind and smoke tunnels. Aerodynamics is a major focus for all teams involved in the world of Formula 1 and can make the difference to a winning team. Students can fine tune designs to optimise speed and drag co-efficiency.

7 - PIT BOOTH
Put together an informative display showing your work through all stages of the project. Think about your team identity.

8 - SCRUTINEERING
Cars are submitted to parc fermé where the judges scrutinise every dimension to check they comply with the Rules and Regulations.

9 - ENGINEERING JUDGING
Judges question teams on how their car has been manufactured and why particular designs were chosen.

10 - VERBAL PRESENTATION
Prepare a presentation to perform to a panel of judges covering all aspects of the challenge. This will be completed within a set time limit. (10 mins)

11 - PORTFOLIO JUDGING
Put together a 20 page A3 portfolio documenting your project.

12 - RACE
Teams are judged on car speed, as well as supporting evidence of their design, verbal presentation and marketing display stand in “the pits”. Teams put the cars to their ultimate test by racing them over a measured distance with the F1® Schools 20m elevated track and F1 in Schools race system.

Compete regionally, nationally and internationally at the World Finals for the Bernie Ecclestone World Champions Trophy.

f1inschools.com
World Collaboration

F1® in schools is active in over 44 countries worldwide

National champions from all corners of the world compete annually for the Bernie Ecclestone trophy

f1inschools.com
Has being involved in F1® in Schools changed my life? Definitely! Formula 1 racing is about achievement. It’s about how you set a goal and, through teamwork, planning, excellence and hard work, how you achieve that goal. You need exactly the same attributes to be successful in F1® in Schools and, ultimately, successful in life.

My outlook has changed. Previously I’ve had hopes and aspirations for the future but F1® in Schools has taught me how I can make my dreams become reality. It has taught me the importance of working effectively with others and as part of a team. Within our team we have built unshakeable bonds and we work closely with people from the local community as well as national and international businesses.

Our achievement in F1® in Schools has also made me realise that success comes through hard work and this will be the same for other areas of life, whether personally, academically or in any future career.

Emily Latham
Team Manager, Dynamic
UK National Champions 2010 & 2011

THE ULTIMATE DREAM REALISED: FROM F1® IN SCHOOLS TO THE REAL WORLD OF FORMULA 1®!

“I wouldn’t have got this far without F1® in Schools”, says Matt Cruickshank, a 23 year-old graduate from Sydney, Australia, who has realised his ambition to work in Formula One. “My experience in the programme led me to secure a work placement followed by a full time job in Aero at Red Bull Racing.”

Matt represented Australia at the 2008 F1® in Schools World Finals in Malaysia. There, his team finished third outright, beating students from more than 20 other nations and also picked up the Best Engineered Car Award.

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“F1® in Schools bought out the passion I had for motorsport and engineering. It also gave me a unique insight into F1 and taught me a lot about the industry which was vital when I applied for this job,” Cruickshank continued.

“What F1® in Schools taught me general engineering skills, how to solve problems. It also taught me a lot about how to work as a team to achieve goals!”

He adds, “I always wanted to work in F1 but ultimately I saw it as a long term goal. I certainly never imagined working in F1 in my second year of university. If you had told me 5 years ago that I would be working for the a World Champion of Formula 1 team I probably wouldn’t have believed you.”

This competition has given me something that the National Curriculum never could; the chance to have fun with my friends whilst encompassing every discipline possible providing me with an invaluable wealth of experience.

It has also given me so many opportunities, Formula 1 is such a high-powered, high pressure world but being part of F1® in Schools has allowed us to visit team factories and travel the world and be in the pits and garages at Grand Prixs just minutes before the start of a race.

After graduating from the F1® in Schools competition I joined the F1® in Schools management team on a one year placement before starting my degree at the University of Reading. I’ve had the time of my life and I’m now looking forward to my new role at BMW UK.

Matt Cruickshank
Placement Student
Red Bull Racing

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"I truly believe that this initiative will help to attract girls to be engaged in motorsports."

MONISHA KALTENBORN
Chief Executive Officer, Sauber F1 Team Patron of F1® in Schools Global & F1® in Schools India

"I am delighted to have become a Patron for F1® in Schools. The tasks that all participating students have to go through to establish their own Formula 1 team during the Challenge not only expose them to the type of work required for creating, producing and running a team such as Williams, but also equips them with a variety of life skills. It will be fascinating for us to see first-hand what the designers, engineers and marketers of the future come up with year after year."

CLAIRE WILLIAMS
Deputy Team Principal
THE FIA GOLDEN RULES

I WANT TO BE SAFE
I PROMISE TO:

BELT UP
all passengers are my responsibility

RESPECT THE HIGHWAY CODE
rules are there to protect us all

OBEY THE SPEED LIMIT
my car is made of metal, pedestrians and children are not

CHECK MY TYRES
both for wear and for correct inflation, including the spare

DRIVE SOBER
when I am drunk or on drugs, I am a danger on the road

PROTECT MY CHILDREN
keep them safe in car seats

PAY ATTENTION
calling and texting make me dangerous

STOP WHEN I’M TIRED
getting there late is better than not at all

WEAR A HELMET
motorbikes and bicycles don’t protect my head

BE COURTEOUS AND CONSIDERATE
respect other drivers