INTRODUCING THE

F1 in Schools STEM STUDIO

A complete, instant solution for engineering education for schools and colleges around the world.

Coupling a fully-resourced standalone facility with the internationally-renowned STEM education programme, F1 in Schools, this class-leading solution is driving modern learning.

An Advanced Learning Environment

Instant STEM facility...

The F1 in Schools STEM Studio is an innovative concept, designed to deliver STEM education - launched by F1 in Schools, in partnership with Denford and Technology Supplies – offering high-quality equipment and resources within a dedicated stand-alone classroom workshop.

Primarily developed to deliver the F1 in Schools programme, the fully-resourced STEM Studio additionally offers teachers the opportunity to deliver bespoke design & technology / engineering related courses.

The STEM Studio is an ideal instant solution for schools wishing to offer STEM related courses – particularly those in remote locations without access to the resources needed for STEM learning, or where lack of space / facilities may be a restriction.

F1 in Schools
STEM Studio

Create an environment where 21st century skills can flourish...

Creative and manufacturing industries around the world are increasingly calling out for education to provide school leavers and graduates who are equipped to succeed in workplaces of the future.

The world's rapidly changing economies require more than just hard skills, and the F1 in Schools STEM Studio provides the resources to develop not only practical skills, but also such skills as critical thinking, collaboration, creativity and communication, through a cross-curricular, multi-disciplined teaching and learning approach.

The F1 in Schools STEM Challenge

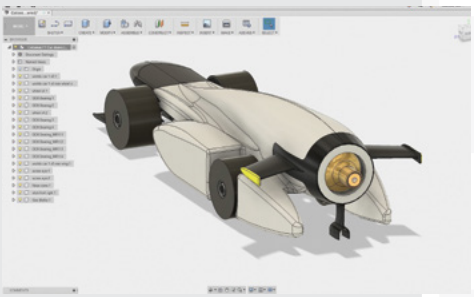
Engaging students from around the world between the ages of 9 to 19 through the magnetic appeal of Formula 1, the competition achieves its objective of changing the perspective of Science, Technology, Engineering, and Maths, which allows students to develop an informed view about careers in these fields.

Tasked with designing a world-beating race car, teams of students design, analyse, make, test and race a model race car, which will not only be air-propelled down the twenty-three-metre-long F1 in Schools Race Track in under one second, but also be scrutinised against race regulations, and be presented to a panel of judges.

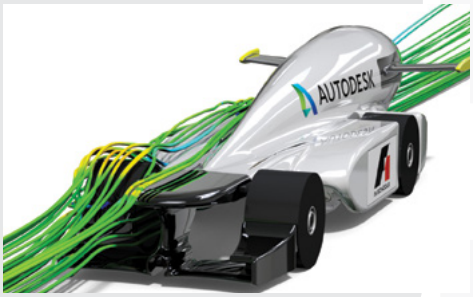
As a combined set of individual elements, the competition provides the ultimate business enterprise experience. As well as working towards the world's fastest race car, students must secure sponsorship for their projects through a well-developed pitch to potential partners, and create a compelling marketing proposition for their team, creating brands, project portfolios, and branded merchandise.

DESIGN AND ANALYSE

The F1 in Schools programme teaches students the principles of design through digital software. Autodesk Fusion 360 is provided as part of the programme, giving students access to industry-leading design software. Through easy-to-follow video support materials, they're able to design an air-propelled race car, which will compete on the F1 in Schools Race Track!



Autodesk Flow Design (also provided with the programme) gives students the opportunity to hone their designs by digitally simulating the air flow around their car design and analysing its performance through the data collected.



F1 in Schools
STEM Studio

MAKE

Having developed and tested a design, teams of students can then bring their designs to life with manufacturing techniques using CNC Routers, Mills, Lathes and Rapid Prototyping machines, as well as Laser Cutting & Engraving machines.

This industry-style experience with machinery is coupled with a range of manual techniques. Hand tools, relevant safety equipment, and materials become a valued part of this manufacturing process.

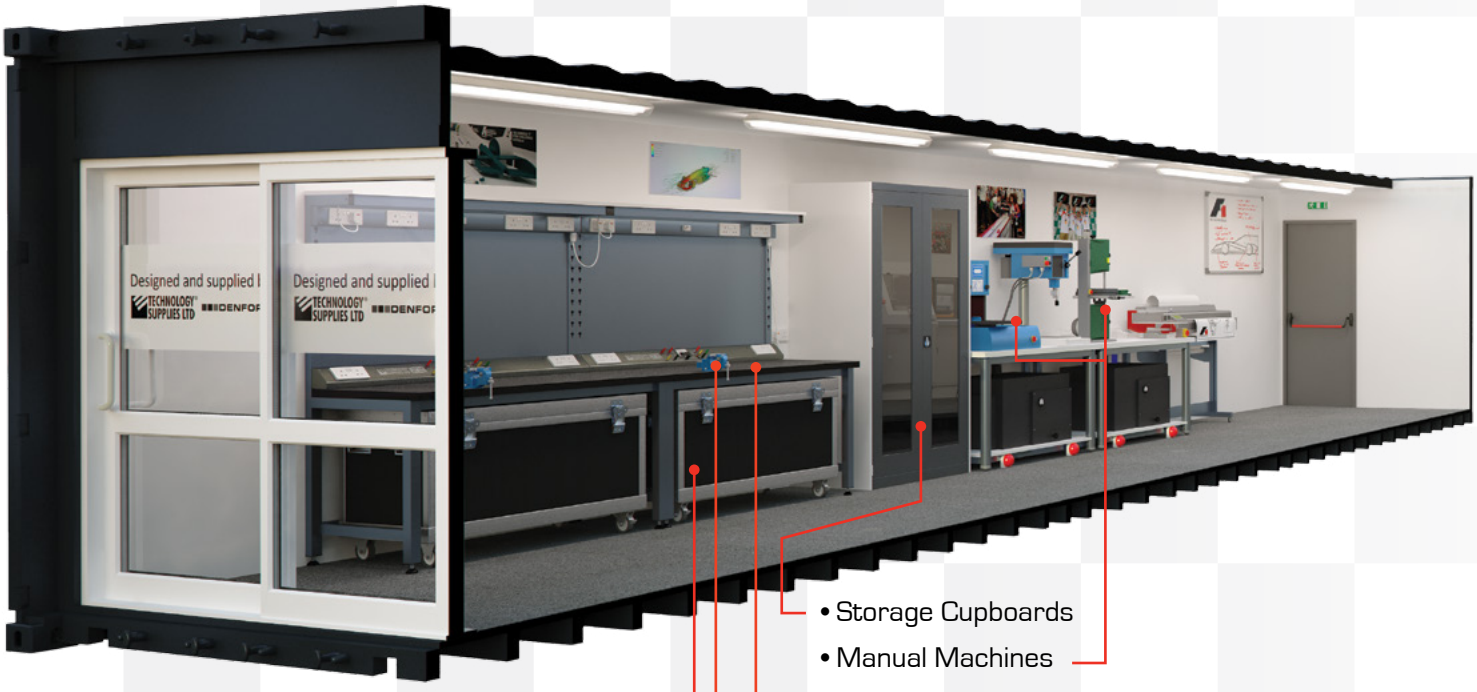
TEST AND RACE

The ultimate culmination to a race car project...!

The Air Trace Visualisation System – a scaled wind tunnel - gives teams the opportunity to visualise the true air flow around their actual race car, and allows for some final adjustments before the car takes to the track.

The F1 in Schools Race Track consists of a light aluminium, durable, moisture-resistant 23.65 metre track, with simple setup and breakdown mechanisms and storage case. The F1 in Schools Race Control System – a custom built data logging system – provides the software and hardware control of the race. Start and finish gates, start boxes, triggers and multi-mode anti-glare display screens provide an immersive experience, where teams combine their data collection and analysis skills with a high-adrenaline F1 race day.

What's in the F1 in Schools STEM Studio?

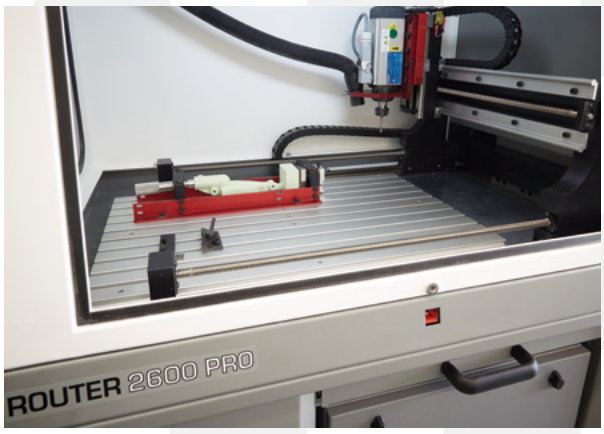


- Storage Cupboards
- Manual Machines
- Benching with Power Trunking
- Small Tools & Consumables Packages
- F1 Race Track in Storage Flight Case

What's inside...

Featuring a collaboration area with audio visual equipment, the air conditioned* STEM Studio incorporates CAD/CAM and woodworking machinery, a laser engraving machine, 3D printers, F1 in Schools Test and Race equipment, as well as work benches with power trunking, storage cupboards and a full complement of hand tools and accessories.

Price includes positioning of the STEM Studio, installation and training.



F1 in Schools STEM Studio requires the following:

- A cabled 3 Phase 415V Power Supply
- A solid flat surface for location

STEM Studio Dimensions:

40ft Long x 9ft 6in High x 8ft Wide

*The Tropical Version of the STEM Studio is fitted with a higher specified Air-Conditioning System to cope with extreme temperatures

F1 in Schools
STEM Studio

- F1 Test Equipment - F1 Air Visualisation System
- F1 Race Equipment - F1 Race Track & F1 Race Control System
- F1 Class Car Consumables
- Denford CNC Router - Router 2600 Pro
- Denford CNC Lathe - Turn 270 Pro
- 3D Printers - x2 UP Box+
- Laser Engraving Machine - VLS3.50 Series
- Collaboration area with AV Equipment
- Laptop Computers for Operation of CNC Machines, Laser and 3D Printers

Want to know more?

The F1 in Schools STEM Studio has been developed collaboratively by F1 in Schools, Denford, and Technology Supplies.

DENFORD®

Denford – established in 1944, Denford develops and manufactures industry-leading CAD/CAM equipment for education. The full range of CNC routers, lathes and milling machines provides high-quality, reliable, British manufacturing into STEM workshops worldwide.

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F1™ in Schools STEM Challenge

F1 in Schools – launched in 2000, the F1 in Schools STEM Challenge is now recognised as the world's most exciting STEM competition, and engages 26,000 schools from 48 countries every year through regional, national, and international events.

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PROUD TO SUPPORT EDUCATION IS GREAT BRITAIN & NORTHERN IRELAND