



As part of their exhibits at the Skills Festival on Wednesday January 27 and Thursday January 28, Telford College of Arts and Technology are challenging visitors to the Skills Festival to take part in the F1 Challenge.

The School of Engineering at Telford College of Arts and Technology has established links with the F1 in Schools Challenge to encourage young people to embark on an exciting yet challenging educational experience by designing a balsa wood Formula One car.

Secondary school children from across Telford and Wrekin will be invited to take part in the challenge, whose main objectives are to change the perceptions of Engineering, Science and Technology, and introduce young people to the exciting challenges that the subjects bring in a fun and interesting way. It is also designed to show young people the different career options in Engineering, Formula One, Science, Marketing and Technology.

The challenge requires students to work in small groups, with each person being assigned a role within the team. The team have to prepare a business plan, develop a budget and raise sponsorship for the race. Teams are encouraged to collaborate with local industry and to forge business links so they can design the best car to get ahead in the challenge. The team have to then develop a "car of the future" using 3D CAD (Computer Aided Design) software on which the Aerodynamics are analysed for drag co-efficiency in a virtual reality wind tunnel using Computational Fluid Dynamics Software (CFD). They will then go on to use 3D CAM (computer Aided Manufacture) software, they will have to evaluate the most efficient machining strategy to make the car.

James Welch, Engineering Tutor at Telford College, who is spearheading the F1 in Schools Challenge at Telford College said "Telford College has always worked closely with the secondary schools in the area, offering vocational qualifications and now the diploma. In addition, the School of Engineering has facilitated an after school engineering club, enabling students to gain their Crest Award. The school has now purchased the complete F1 in schools equipment to further enhance this provision and to offer an exciting curriculum to our full time engineering students. The School of Engineering at Telford College intend to offer all secondary schools in Telford and Wrekin an opportunity to take part in this exciting competition, where their students will learn how to design a Formula One car using the latest Computer Aided Design software, produce the design with Telford College's Computer Aided Manufacturing equipment and finally race their cars, and attempt to beat the existing world record of 1.020 seconds.