

## Greenpower Electric Race Car Club 2019/2020

As we come towards the end of our successful first season building and racing two electric race cars, we would like to invite students (including current Year 8) to consider joining our Season 2 racing teams in September 2019.

Greenpower Education Trust is a UK based charity with an outstanding track record in kick starting careers in engineering. At RGS HW we will use the challenge of building, developing and racing our electric race cars to unlock potential and spark enthusiasm for Science, Technology, Engineering and Maths (STEM) through the intoxicating excitement of Electric Vehicle (EV) motorsport.

The boys will participate in one of two formulae:

- IET Formula 24 challenge for students aged 11-16 years (Years 9 and 10)
- IET Formula 24+ for young people aged 16-25 (Years 11 and 12).

Teams design, build and then race an electric car in Greenpower events at different motorsport venues. Building, modifying and improving the cars will mostly take place over the autumn and spring terms. Race events take place during the months of April, May, June, July and September, culminating in the Invitation Only International Championship meeting in October.

We have started with one completed Formula 24 kit car and one Formula 24+ scratch-built car. Our race teams will be up to 15 students per car. We have a second F24 kit car which needs to be completed before being raced in the 2019/20 season. The boys can use industry-leading engineering and design software, Solid Edge, provided free by the Greenpower global partner Siemens, to design their car's bodywork. This can range from the most basic bodywork to complicated streamlined fairing (see images below).



The teams will organise and operate in the same manner as a professional motorsport team. They will therefore be expected to assign individual managerial and technical responsibilities within a team, which will also include managing a small budget for maintenance and improvements, seeking financial or in-kind sponsorship and encouraging other stakeholders (parents and relatives) to become involved in nurturing their teams. For further details, please see the Greenpower website <https://www.greenpower.co.uk/about> which provides extensive information on their activities.

Applications are now invited from boys going into Years 9, 10, 11 and 12 who wish to participate in the **RGS Greenpower Electric Race Car Club in 2019/20**. Given the limit on numbers (50), priority will be given to continuing members and new applicants who register their interest via Parent Pay by the 11<sup>th</sup> July 2019. Key information details are given below.

### RGS Greenpower Electric Race Car Club - Key Information Details

Royal Grammar School  
Amersham Road  
High Wycombe  
Buckinghamshire  
HP13 6QT

**Telephone**  
01494 524955

**Facsimile**  
01494 551410

**Email**  
[admin@rgshw.com](mailto:admin@rgshw.com)

**Website**  
[www.rgshw.com](http://www.rgshw.com)

**Headmaster**  
Philip Wayne

Registered No. 07492198

**Who is it for?** The Club is open to all students in Years 9-12 who have a budding or fully-fledged interest in science and engineering and will enjoy the challenge of designing, building and racing an electric car.

**How many teams will there be?** The School has acquired two car kits for the Formula 24 teams and the senior boys have scratch built their F24+ race car "Friday Afternoon". Ideally, each car team should consist of approximately 12-15 students and therefore overall demand and availability of staff members will determine the number of teams.

**When and where will the Club operate?** Currently the F24 team meets in the Science Block on Tuesdays (Years 9 and 10) and the F24+ team on Fridays (Years 11 and 12) in line with the availability of the majority of students on these days after school. The F24 club starts at 15.45 and ends at approximately 17.00. Other informal meetings outside this time will be a matter for the teams to arrange or may be mandatory for Fridays prior to race event days.

**What do the Greenpower events consist of?** Race events take place in the months of April through to October (excluding the summer holidays) on Sundays, except the International Final, which takes place on a week day. A race day starts at 07.30 at the track and finishes at approximately 17.30. Each F24 team will participate in three sessions, one practice and two 1 ½ hour races. The F24+ team take part in one practice and one 1-hour race. Consequently, race days will require early starts between 06.00 and 06.15 at school. A full race season will consist of approximately 5-6 events plus the October International Final.

**How much will it cost?** There will be an expectation that students sign up for three terms at a flat fee of £30 per term = £90. In addition, there will be separate event fees of £15 per event, which is required to offset the cost of transport for both the students and their cars, and the £80 per car entry fees. **If you wish your son to take part in the Greenpower Electric Race Car Club, please log onto ParentPay, look up the 'Greenpower ERC' and pay the full amount of £90 by Thursday 11<sup>th</sup> July.** If you feel that the cost involved is prohibitive, please do contact me in strictest confidence and I will see if there is any funding available to assist you. Current members, who will not be signing up for 2019/20 academic year will still be able to participate in the September heats and October Final at no extra cost beyond event fees.

**Is specialised equipment required?** Yes. This consists of full face-visor crash helmets, racing overalls, gloves (all provided) and stout shoes or trainers.

**Can parents / carers get involved?** Yes please. If you have experience, skills or contacts, which you would be prepared to share with our students, please email Dr G Brown at [gtb@rgshw.com](mailto:gtb@rgshw.com).

If you have any further questions about any of the above details or the Club, please contact me.

Dr G Brown  
Chemistry Department