

Siemens and GEAR UP fuel Greenpower Utah Electric Car Challenge

By Leigh-Anderson • July 9, 2019 • 4 MIN READ



[Greenpower USA](#) has launched its 4th annual [Greenpower Electric Car Challenge](#) on the Utah Motorsports Campus this past April 25th. Started in 2015 with a handful of schools taking part, the competition involves students working in teams to design, build, and race single-seat electric car kits from GreenpowerUSA. It offers elementary through high school students an opportunity to engage in science, technology, engineering, and mathematics activities while guided by mentors and teachers. By building and racing an electric car alongside their peers, students learn by doing and gain relevant STEM experiences.



Utah Motorsports Campus on April 25th. The GreenpowerUSA Foundation runs engineering challenges for schools to advance learning in the subjects of sustainable engineering and technology to young people. The foundation's initiatives operate a series of races in 15 different states throughout the United States, creating over 150 teams altogether. With a strong alignment to education, their goals include presenting engineering as a fascinating and relevant career choice as well as demonstrating the importance of STEM subjects to solving the problems faced by today's societies particularly in the areas of sustainability.

Since its start in 2015 the Utah Electric Car Challenge has grown to include 24 teams, consisting of elementary school Goblin cars and secondary school F24 cars, showcasing the work of 18 schools in Utah and the rest in Nevada. In what is called the Goblin Games, elementary school teams compete in three types of beginner races: a spring/drag race, a slalom race, and a lap/circuit race. In the F24 division, the event starts with qualifying heats to determine which teams advance to the final round. Qualifying cars then race in one final set. Scoring is based on the number of continuous laps, with extra points awarded for cars competing in the fastest lap and a video presentation.

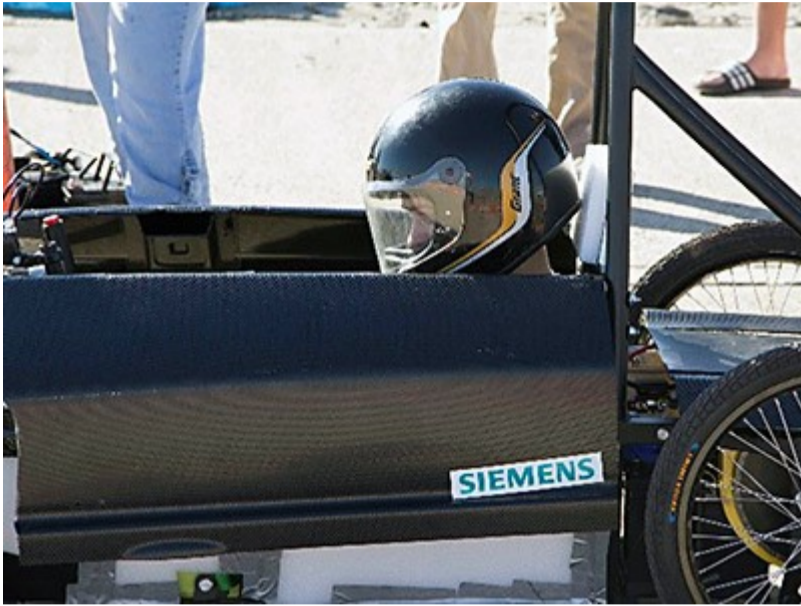


Student teams gear up for the races. To prepare for the event, students are encouraged to enroll in self-paced online engineering and design courses at [GEAR UP University](https://www.gearup.edu/). Courses such as [electric car modules](#), [creating the F24 car body](#), and [3D CAD modeling](#), include videos and short tutorials. Students are also encouraged to research current transportation challenges in Utah to discover how the Greenpower Challenge could help resolve issues, allowing students to gain an understanding of the importance of the project beyond the scope of the classroom.

Siemens is a technology partner for GreenpowerUSA and shares many of the same goals as both Greenpower and GEAR UP when it comes to preparing young people for the future and introducing them to STEM related topics in fun and interesting ways. Siemens provides participating schools with programs such as [Solid Edge](#) to help students design their cars and get a glimpse of the internationally used software.

To learn more about Siemens' partnership with GreenpowerUSA, visit [ASME's](#) webpage as they talk about how creative teaching prepares students for engineering. [Click here](#) to learn more about all of the advanced engineering tools that Siemens offers student vehicle teams.

In addition to planning and building their car, students are involved in recruiting potential sponsors, completing coursework, and creating a video. They also must plan the logistics of how to move their car from their school to the Utah Motorsports Campus on race day. Each team starts with a kit from GreenpowerUSA, or car from a previous year that can be modified or improved.



Teams are scored on the number of continuous laps made. GreenpowerUSA has a second sector in the UK called Greenpower Education Trust, which holds the same type of competitions as counterparts in the United States. As a proper example of how valuable the design and building process is in helping students gain a stronger understanding of engineering, team in the UK has documented their entire Greenpower journey from start to finish. Take a look at their [blog](#) and learn about how the Greenpower car building experience teaches and challenges students.

Competitions like this take place all over the country, and the world, promoting engineering technology skills in students of age 9-25. The Utah event is co-organized by USU STARS! GEAR UP and the Utah Governor's [Office of Energy Development \(OED\)](#), with support from USU's College of Engineering — [Sustainable Electrified Transportation Center](#), and [GreenpowerUSA](#).

[Click here](#) to see a [Race Day Recap](#) from this year's Utah competition. The next race day is scheduled for April 23, 2020 at the Utah Motorsports Campus, in Erda, Utah. 24 teams from Utah and Nevada competed.



News and media updates on the Utah 2019 challenge can be found in Greenpower USA's [news and highlights section](#).