



# 2022-2023 Sponsorship Packet



# What is Hot Wheelz?

## Our Mission Statement

RIT Hot Wheelz is a solar racing team dedicated to professionalism, mentorship, experiential learning, and preparing women for leadership roles through a real world design and build experience.



## About Us

Our team is primarily made up of female engineers in the Kate Gleason College of Engineering at the Rochester Institute of Technology. We welcome students from all majors, including all disciplines of engineering, engineering technology, business, and liberal arts.

We firmly believe in empowering young women to feel confident and be successful. We want every individual to know they can do whatever they set their minds to, which is why we frequently participate in several K-12 outreach programs. Sharing our mindset, values, and grit with others is an important aspect of our team.

We believe in giving all members a chance to explore their interests. Our unique team fosters an environment of learning and teaching, and we always find opportunities to explore new topics and be mentors to our teammates. Learning from one another in a hands-on, practical environment not only emphasizes concepts taught in classes, but bonds our team and creates friendships that last beyond race day.

# Our History

## Beginnings: 2012-2016

RIT Hot Wheelz began in 2012 as an electric dragster team, where we won RIT's inaugural President's Challenge at Imagine RIT. In subsequent years, our team redesigned and reconfigured small, commercially available combustion and electric vehicles to compete in Endurance and Autocross races. When the President's Challenge began to shift away from vehicle racing, our team chose to take the next step: enter an international, collegiate Formula SAE competition.



### Year One: 2016 - Electric

In 2016 after a two-year design and build phase our team built a Formula-style electric car. In our first year at Formula Hybrid SAE competition, we placed 3rd in the Electric Drive Class and received two professionalism awards: the General Motors Spirit of Formula Hybrid Award and the Fiat Chrysler Gracious Professionalism Award.



### Year Two: 2017 - Electric

After a summer of research and a fall of design, we rebuilt our car from a bare frame with new batteries, a sleeker body, improved mechanical systems, telemetry, and more. We competed again at Formula Hybrid in May 2017 and this time took 1st place in the Electric Drive Class and received IEEE's Excellence in Electric Vehicle Engineering award.



### Year Three: 2018 - Hybrid

In 2018, using our existing knowledge of electric vehicles, we created a series hybrid Formula-styled car. We competed in May 2018 and placed 3rd overall in the Hybrid Category. We also received 2nd place for the Test Equity and Keysight Technologies Hit the Ground Running Award in recognition of our organization and overall readiness for competition.



### Year Four: 2019 - Hybrid

In 2019, we worked to build a parallel hybrid Formula-styled car and placed 4th overall in the Hybrid Category. We also received the Test Equity And Keysight Technologies award for Project Presentation and the IEEE Excellence in Project Management Award.



### Year Five: 2020 - Electric

In 2020, we returned back to our roots and worked to design an electric Formula-styled car. In May 2020, we placed 1st overall in the Electric Category, placing 1st in project management and 2nd in design.

# Our Project

## The 2020-2023 Solar Race Car

We are beginning a new chapter in our team's history and entering the realm of solar-powered vehicles. Our goal is to maximize efficiency while reducing weight and drag to be able to compete in the Formula Sun Grand Prix and the American Solar Challenge in the summer of 2023.

To compete in these competitions, we must abide by the rules required for the ASC and pass NYS inspection to make our vehicle road compliant for the cross country competition. During the 2021-2022 school year our team focused primarily on design and analyses, while this year's main goal is to build and test the vehicle.

We have developed a list of team goals and objectives with benchmarking in mind. The purposes of these goals are to optimize our design, improve our build process, and excel at competition.



### Our Goals & Objectives

- Increase multi-disciplinary diversity by 20%
- Fundraise more than \$100k by May 2023
- Complete testing plans for all critical vehicle components
- Have a car weight of less than 450 lbs
- Pass a mock rules inspection by May 2023
- Have a completely built, tested, and validated solar car by May 2023

# Our Competition

## Formula Sun Grand Prix

The Formula Sun Grand Prix is a three day annual international track competition. The winner of the Formula Sun Grand Prix is determined by the number of laps completed over the course of the three days of racing. The team with the fastest time for a single lap also receives high recognition. The Formula Sun Grand Prix serves as a qualifying event for the American Solar Challenge.



## The American Solar Challenge

The American Solar Challenge is a multi-day cross country endurance rally across North America. It is held every other year and is open to collegiate solar teams from all over the world. Before being eligible to compete in this competition, teams must go through rigorous planning and scrutineering by competition officials to assure that their vehicle can withstand real world driving conditions.

Teams drive through a mix of city and highway driving, on public roads of various conditions. Energy management is key for this multi-day competition. The winner of this competition is determined by the total time it takes to complete the race route.

# Your Contribution

By starting a corporate sponsorship with us, you are developing a unique relationship with an evolving team. Future growth and progress can be directly linked back to contributions. Sponsorship provides the opportunity for you to support both the educational and professional development of hard-working, multidisciplinary students. It also creates an environment that allows sponsors to share more about who they are as well as what they do to a wider audience. Contributions to Hot Wheelz have a big impact on our team's success and in the pathway to achieving our goals.

Please note: Contributions can take the form of money, equipment, or materials. Any "in-kind" donation of equipment, materials, or parts is calculated at its dollar value to determine the appropriate sponsorship level as described below.

All contributions are 100% 501(c)(3) tax deductible.

	SOCIAL MEDIA RECOGNITION	LOGO ON CAR	LOGO ON WEBSITE	MARKETING MATERIAL PROMOTIONS	INVITATION TO TEAM SHOWCASE	FIRST CHOICE OF CAR LOGO
<b>Pit Crew</b> \$499 or less	✓					
<b>Energized</b> \$500 - \$999	✓	SMALL	SMALL			
<b>Performance</b> \$1000 - \$2499	✓	SMALL	SMALL	✓		
<b>Charged Up</b> \$2500 - \$4999	✓	MEDIUM	MEDIUM	✓		
<b>Endurance</b> \$5000 - \$9999	✓	LARGE	LARGE	✓	✓	
<b>Champion</b> \$10000 or more	✓	LARGE	LARGE	✓	✓	✓

# Contact Information

## Team Contacts

### Project & Team Managers

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## Team Email

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Please reach out with any and all questions and concerns

## Social Media



@rithotwheelz



rithotwheelz.com



RIT Hot Wheelz Formula SAE

## Address Information

Checks can be made payable to RIT Hot Wheelz and sent to:

ATTN: RIT Hot Wheelz  
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