

HyTech

RACING

2016 SPONSORSHIP PACKET



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RACING

Georgia Institute
of Technology

OUR TEAM

HyTech Racing was formed in 2011 as a student competition team at the Georgia Institute of Technology, dedicated to the design and development of alternative energy, open-wheel race vehicles. HyTech's mission is to equip the next generation of young engineers and business leaders with the practical skills and leadership qualities necessary to make an impact in the automotive industry. Members of HyTech Racing have a chance to learn about all components of electric vehicle design and production through research, CAD, machining, component sourcing, manufacturing, testing, and project management. Due to the complexity of alternative vehicle development, the team is inherently multi-disciplinary, representing a diverse range of students across majors and skills.

FORMULA HYBRID

Formula Hybrid is an international competition that was founded and is run by the Thayer School of Engineering at Dartmouth. This competition is part of the SAE Collegiate Design Series and takes place every April at the New Hampshire Motor Speedway. Formula Hybrid provides an interdisciplinary design and engineering challenge for undergraduate and graduate students and includes three classes of vehicles: hybrid, electric-only, and hybrid-in-progress.

FORMULA SAE ELECTRIC

Formula SAE Electric is a student design competition for electric open-wheel race vehicles. The competition is organized by SAE International and is part of the SAE Collegiate Design Series. This competition takes place every June in Lincoln, NE and involves a variety of dynamic and static events, including: acceleration, autocross, business logic case, efficiency, endurance, and skid-pad.

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OUR SPONSORS

HyTech Racing is proud to have sponsors from a wide range of industries. Donations and in-kind gifts from our sponsors go directly to supporting development of the team's race vehicle. Our sponsors benefit from recruiting and developing a relationship with our team members. In addition, HyTech makes appearances at on-campus events 4-5 times a semester, connecting with students, faculty, and parents. The team is also a part of the Green Alliance at Georgia Tech, a group of 15 organizations on campus with a common goal of environmental sustainability, and competes annually at a national race competition. These events are expected to provide positive brand engagement for our sponsors through the students, professors, and industry professionals that we interact with on an annual basis.

OUR STUDENTS

The team is composed of a diverse, talented, and active group of undergraduate and graduate students studying mechanical, electrical, chemical, computer engineering, and business. Each semester, over 20 students are actively involved on the team. Throughout their time at Georgia Tech, members of HyTech are involved on-campus and off-campus. Members have accepted internships, co-ops, and taken full-time jobs at a wide range of companies. Examples include: Chattahoochee Composites, Deloitte, ExxonMobil, Ford, General Motors, Honda, KPMG, NASA, Porsche, and Tesla Motors.



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FORMULA HYBRID 2015 COMPETITION

HyTech successfully completed its first electric vehicle on schedule and won 3rd place in the Formula Hybrid competition in late April, 2015. HyTech sent a sub-team of six students and the team's advisor to represent Georgia Tech at the competition. At competition, HyTech received invaluable feedback for the design of the 2016 competition vehicle from experienced professionals. In addition, HyTech collaborated with other teams to consider new and improved systems to incorporate in the 2016 competition vehicle.



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OUR NEXT VEHICLE

HyTech is currently designing a new vehicle from the ground up for the 2016 Formula SAE Electric and Formula Hybrid competitions. The 2016 vehicle for HyTech will include a newly designed chassis, enhancements to the current mechanical systems, and implementation of a new motor and motor controller. The expected cost for production is \$20,000, and the expected completion date is February, 2016.

PRIMARY IMPROVEMENTS FOR 2016

Our expected improvements for the 2016 vehicle include:

- 50 kg Weight Reduction
- Regenerative Braking for Improved Electrical Efficiency
- Replacement of Serial Communication Network with CAN Protocol
- Successful Completion of Vehicle SolidWorks Model
- Full Test of Vehicle Performance and Efficiency

KEY SPECIFICATIONS

Our 2016 Competition Vehicle includes:

- Drive Train: Electric
- Motor: Emrax 207 Liquid Cooled 3-Phase AC Induction (100 kW Max)
- Motor Controller: Tritium Wavesculptor200 Motor Inverter
- Accumulators: 300V Customized Battery Pack
- Controls: CAN Protocol
- Expected Vehicle Weight: 240 kg

SPONSORSHIP LEVELS

HyTech Racing is made possible by our sponsors. In addition to a mutually beneficial relationship, sponsorship of HyTech provides positive brand engagement through our activities on campus and at competition. Please consider our different sponsorship levels below and becoming a partner with HyTech Racing. We truly appreciate your support!



\$5,000+

Large Trailer Sticker, Large Sponsor Sticker on Vehicle, Large Sponsor Logo on Team Paraphernalia, Large Logo on Team Webpage, Newsletter

\$2,500+

Medium Trailer Sticker, Medium Sponsor Sticker on Vehicle, Medium Sponsor Logo on Team Paraphernalia, Medium Logo on Team Webpage, Newsletter

\$500+

Small Trailer Sticker, Small Sponsor Sticker on Vehicle, Small Sponsor Logo on Team Paraphernalia, Small Logo on Team Webpage, Newsletter

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