



# Tufts

*Hybrid Racing*



2012 – 2013  
Sponsorship Brochure

# Introduction

Dear Prospective Sponsor,

In this short brochure we will introduce you to the Tufts Hybrid Racing Team and show you how we can work together to achieve success.

The Tufts Hybrid Racing Team is a not for profit organization of students who design, build, test and race a formula style, hybrid car in the Formula Hybrid competition.

With your support we will drive to maintain our high standard for education, expertise, and performance.

We hope you will join us,

The Tufts Hybrid Racing Team





# What is *formula* **HYBRID** ?



The Formula Hybrid competition was established by Dartmouth College's Thayer School of Engineering in 2007. The competition is held every May at New Hampshire Motor Speedway and challenges students from around the world to design and build their own gas/electric hybrid power train.

Formula Hybrid is an exhilarating, international design competition where students are asked to assume that a manufacturing firm has engaged them to design, fabricate and demonstrate a prototype hybrid race car for evaluation as a production item. The teams and their cars are judged in every aspect with static events to judge the marketability and design of the car and dynamic events to its on-track performance.



## Points Breakdown

### Static Events

Business Presentation	100 pts
Design Presentation	200 pts

### Dynamic Events

All Electric Acceleration	75 pts
Full Hybrid Acceleration	75 pts
Autocross Sprint Race	150 pts
Endurance Race	400 pts

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Total	1000 pts
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# Inside Tufts Hybrid Racing

Tufts Hybrid Racing is one of largest and most established student design projects at Tufts University. The team is five years old now, and we are run and organized completely by student volunteers.

Over 20 students with a wide variety backgrounds, nationalities and majors participate on the team. The team is represented by many different fields of study from mechanical and electrical engineering, to computer science, to economics and business management.

While the team has over 20 engineers on it, there are also engineering management students and economics and business majors who organize the team and its fundraising. The majority of team's funds are raised by students on the team.

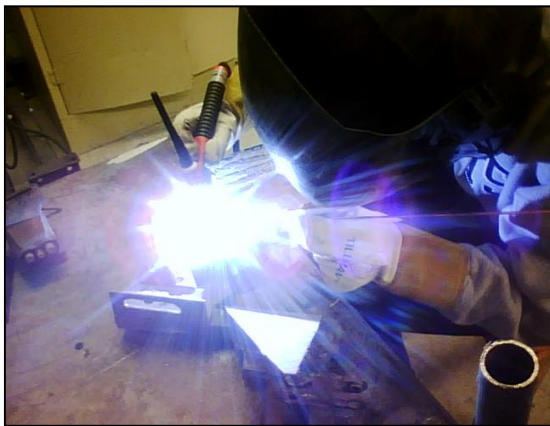
## 2012-2013 Tufts Hybrid Racing Budget

<b>Chassis</b>		<b>Administration</b>	
Frame Updates	\$112	Tools and Hardware	\$375
Body Panels	\$1,500	Competition/Travel/Meals	\$5,425
6 Point Driver Harness	\$350	Promotional Events and Team Uniforms	\$925
Update Braking System	\$216	Printing/Advertising	\$435
<b>Subtotal</b>	<b>\$2,178</b>	<b>Subtotal</b>	<b>\$7,160</b>
<b>Drive Train</b>		<b>Electrical Systems</b>	
Radiator Cooling System	\$179	Update Battery Boxes	\$1,088
Fuel Injection System	\$400	Assorted Sensors	\$910
Shifting System	\$785	Engine Control Unit	\$878
Chain Tensioner	\$298	Data Acquisition System	\$1,124
<b>Subtotal</b>	<b>\$1,662</b>	<b>Subtotal</b>	<b>\$4,000</b>
<b>Total</b>			<b>\$15,000</b>

# Our Next Car

## The THR 13

From the Fall of 2012 through the Spring of 2013, the Tufts Hybrid Racing team will undertake an ambitious design program. We will upgrade our existing car, to comply with the new rules and compete this Spring, and we will begin designing a brand new for the following year. Our design process has already begun with drawing the entire car in CAD programs.



After each part is optimized with Finite Element Analysis and Computation Fluid Dynamics, we will begin to fabricate and assemble the different parts of the car. Team members are taught milling, lathe turning, laminating, and welding by more experienced teammates and university staff members.

When the car's assembly is complete, we will run a thorough testing program to validate the quality of the car's system's, handling, and reliability. This phase also allows the drivers to gain valuable experience behind the wheel.



Finally after all the ups, downs and sleepless nights of an extensive design and build project, the team will head north to New Hampshire Motor Speedway to take on the world.





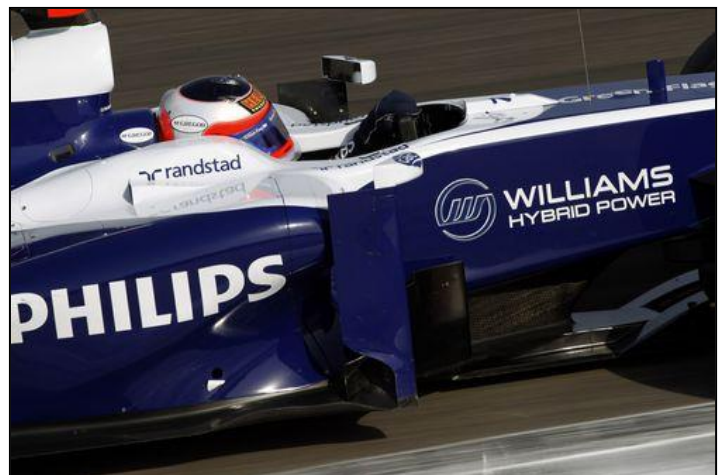
# Why Hybrid? Why Not?

As fossil fuel supplies dwindle, engineers have to become increasingly clever and creative to solve the world's energy problems. While our remaining energy sources and materials must be used in a responsible manner, and new and alternative solutions must be explored, we don't need to sacrifice performance or style to accomplish either of these goals.



"There's a perception out there that Green Energy is slower or worse. Motor racing is a really good platform for demonstrating that it doesn't have to be, and it can be exciting and fun and just as fast." Andrew Burston, Flux Dynamics and Formula Hybrid Design Judge.

Here at Tufts Hybrid Racing, we understand the need for new energy efficient vehicles, but we also love to go fast. We're out to show just how fast hybrids can be.



# Sponsorship Benefits

The Tufts Hybrid Racing Team is an established design team that not only competes in international competitions, but is also active in our community. By donating your time and/or money you are not only supporting the supplementary education of the engineering leaders of tomorrow, but also hundreds of people who take in our car at expos and competitions will be exposed to your brand displayed in a prominent location on our car. Feel free to contact us if you are interested in other forms of branding or marketing.

Team members are part of an organization that demands nothing but the best, and thus they are used to working through the stresses of a real world engineering project. As a sponsor, you are encouraged to actively recruit Tufts Hybrid Racing Team members who have already had 3-4 years of practical engineering and/or engineering management experience.

Sponsorship donations can come in the form of company time and resources, gifts in kind such as parts or equipment, or monetary donations. The Tufts Hybrid Racing Team is a 501(C)(3) non profit organization, and all in-kind or monetary donations are tax deductible. Our Sponsorship Levels are as follows:

## Platinum (\$10,000+)

- Large Logo on Nose Cone
- Large Logo on Side Pods
- Complimentary Tufts Hybrid Racing Polo
- Logo on Tufts Hybrid Racing Work Shirts

## Gold (\$5,000-\$9,999)

- Medium Logo on Nose Cone
- Medium Logo on Side Pods
- Complimentary Tufts Hybrid Racing Polo

## Silver (\$1,000 - \$4,999)

- Medium Logo on Side Pods
- Complimentary Tufts Hybrid Racing Polo

## Bronze (\$1 - \$999)

- Small Logo on one Side Pod

All sponsors shall receive a complimentary team photo, their logo printed in team marketing material, and recognition on the Tufts Hybrid Racing Team web site with a link to the site of their choice.

Team Address:  
Tufts Hybrid Racing  
504 Boston Ave  
Medford, MA 02155

For more information, please contact:  
Chris Jackson, Project Leader  
christopher.jackson@tufts.edu

Or visit:  
[www.tuftshybridracing.org](http://www.tuftshybridracing.org)  
<http://formula-hybrid.org>

Private Donations in the form of check  
or pledge can be made out to:  
The Tufts Hybrid Racing Team

And sent to:  
Jackie Natale  
Associate Director of Development  
School of Engineering, Tufts University  
80 George Street, 3rd Floor  
Medford, MA 02155



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**YASA** **School of Engineering** **Partner with Performance™**

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