RIT RACING

RIT FORMULA SAE RACING TEAM

2018 - 2019

SPONSORSHIP PACKET

FORMULA@RIT.EDU
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>About the Team and Competition</td>
<td>4</td>
</tr>
<tr>
<td>About the Cars</td>
<td>5</td>
</tr>
<tr>
<td>Detailed Competition Description</td>
<td>6</td>
</tr>
<tr>
<td>Sponsorship Value Proposition</td>
<td>7</td>
</tr>
<tr>
<td>Sponsorship Level Breakdown</td>
<td>8</td>
</tr>
</tbody>
</table>
Executive Summary

The RIT Formula SAE Racing team, RIT Racing, is a collegiate, co-ed, multidisciplinary, student-run motorsports team. We compete against other university teams throughout North America and Europe. Over the 26-year history of RIT Racing, our team has engineered competition-leading racecars, establishing ourselves as one of the top teams in our racing series.

This year, RIT Racing will again design two cars; one powered by a gasoline engine, and one propelled by an electric motor. We present unique opportunities for businesses involved in motorsports, as well as those looking for eco-minded marketing exposure.

Nearly 600 schools worldwide are involved in the Formula SAE series, run by the Society of Automotive Engineers. They all bring different varieties of an open-wheel racecar to competition. Our cars are holistically designed and judged not only on performance, but on overall quality of execution, including cost, design, ergonomics, safety and professionalism.

RIT Racing offers opportunities for students to learn outside of the classroom, while giving them tangible projects to apply knowledge learned in the classroom. RIT Racing provides excellent networking opportunities for students, by providing access to some of the most respected original equipment manufacturers and suppliers in the world.

Students are challenged to deliver a product (the racecars) on time and on budget, while maintaining compliance with the competition rulebook. This process grows the students’ experience in working within time and budgetary constraints, giving students an advantage over their peers when joining the workforce after graduation.

Value Proposition

Your tax-deductible contribution to RIT Racing gives university students the opportunity to demonstrate and grow their knowledge outside the classroom. Furthermore, your contribution provides Rochester’s own Formula SAE racing team the resources to continue to perform at a winning level. As an extracurricular university organization, RIT Racing is an officially recognized 501(c)(3) entity under United States IRS tax code.

All partners of RIT Racing receive mention and display on the racecar, our main deliverable. Discussed later in this document are sponsorship level breakdowns, describing what each donor will receive from their investment in our team.

Each donor will gain association with one of RIT’s most popular extra-curricular organizations and will receive mention and engagement on RIT’s media platforms. This includes social media, newsletters and publications, and the standard website. All of these attract key college-aged individuals, alumni, family members, and other sponsors/donors.
About the Team and Competition

About the Team:
RIT Racing is comprised of a dedicated group of over 40 students. We design, build, test, tune and race our cars from the ground up every year. Our team is racing into the future after a successful 26th season in 2018.

RIT Racing has established itself as one of the most successful competition teams in the world, in our series. In order to produce a quality vehicle, the team operates like a professional engineering force. The Chief Engineer and Project Manager lead the organization, while group leaders keep each department on track to complete their deliverables on time. The team is broken up into distinct groups: Aerodynamics, Brakes & Driver Controls, Chassis, CNC Manufacturing, Combustion Powertrain, Composites Manufacturing, Drivetrain, Electric Powertrain, Electronics, Fabrication, Suspension, Testing, Vehicle Dynamics, and Marketing. Designers use the most advanced modeling and analysis software. Manufacturing groups access a full Machine Shop with standard and CNC equipment, and a full Composites shop. All of this ensures a sound design and manufacturing process, and exceptional racecars.

About the Competition:
Formula SAE competitions are sponsored by the Society of Automotive Engineers. SAE is an internationally recognized professional engineering society with over 60,000 members worldwide, dedicated to the advancement of land, sea, air and space vehicles. They establish and enforce specific rules and guidelines for multiple Collegiate Design competitions, including Baja SAE and Formula Hybrid. Formula SAE, our series, is the largest of these competitions, with over 600 university teams worldwide.

Unveiling:
Each spring, RIT Racing extends an invitation to all of our sponsors and alumni to attend the Imagine RIT Innovation and Creativity Festival. This campus-wide event serves as the official unveiling of our new racecars to the general public. The event is a wonderful opportunity for partners to share in the great sense of accomplishment that the project entails for members of RIT Racing, and the RIT community at large.

RIT Racing owes tremendous gratitude to team partners over the last 26 years. We aspire to maintain and grow the relationships with each of our partners that enable the completion of our projects at an RIT level of quality and performance.
About the Cars

About F27:
F26 was successful at competition, earning a place in Design Finals and placing well in dynamic events at all three competitions it attended; Formula SAE Michigan, Formula North, and Formula Student UK. F27 will build upon RIT Racing’s legacy as our 27th combustion car while we continue to refine our designs and become even faster than before. F27 will be composed of a redesigned Carbon Fiber Monocoque chassis design, incorporating lessons learned from F26. We are also further refining our complete aerodynamics package and increasing our engine output by over 50% through the addition of a turbocharger. These changes require a redesign of most components on the vehicle, so F27 will be a truly revolutionary racecar.

About E3:
E2 was very successful at the Formula North competition, winning the Autocross and Endurance events, and placing Second Overall. E3 will build on the success of E2, advancing RIT Racing’s electric racecar even further. Foremost among these enhancements is a redesigned chassis, to allow for more ambitious redesigns of the vehicle’s systems. Most importantly, our accumulator will be completely redesigned with lithium polymer cells.

RIT Racing also plans to continue on the path towards a winning package by utilizing an aerodynamic system similar to our combustion car (F27). These enhancements, combined with RIT Racing’s extensive structural and vehicle knowledge, will make E3 a winning racecar.

For both cars, more emphasis will be put on extensively validating our calculated design loads and forces, ensuring that the cars are designed to be as mass efficient as possible. A brand new data acquisition system, designed completely by our team, will gather data from every corner of the car and report it to a central logging device. With all of these innovations, our electric car and our combustion car will stay among the leaders of the Formula SAE competition.
Detailed Competition Description

Formula SAE competitions consist of technical inspections and four days of static and dynamic events. The competition evaluates the teams and their cars through handling, performance, reliability, manufacturability, serviceability, design, marketing and cost. Formula SAE competitions are held in Brooklyn, Michigan in mid-May; Barrie, Ontario in early June; Lincoln, Nebraska in late June; the United Kingdom in early July; Budapest, Hungary in mid-July; Austria in late July; Germany in August; and Australia in early December. The following is a description of the competition events and their associated point values out of 1000 total possible points.

**Engineering Design: (150)**
This event rates the quality of engineering design used in the development of the racecar. Judges evaluate the level of innovation, as well as the teams’ knowledge of design concepts. During this event, vehicle test data and analysis are also scrutinized.

**Skid Pad: (50)**
In this event, the cornering capability of the racecar is tested. The car must travel around two loops in a figure eight formation as fast as possible without displacing any of the cones that outline the course.

**Acceleration: (75)**
This event tests the vehicle’s acceleration from a standstill over a 75-meter distance.

**Autocross: (150)**
The driver must maneuver the car through a tight course consisting of hairpin turns, slaloms, straightaways, and chicanes. Each team is granted four individual attempts at the fastest lap time.

**Endurance (300)**
This event tests the endurance of both car and driver. The vehicle must travel a total distance of 22 kilometers with one stop for a driver change at the halfway point. Any vehicle failure disqualifies the car from the event. There is no opportunity for repairs or adjustments once the car goes out on track.

**Efficiency (100)**
Fuel economy is calculated after the finish of the Endurance event. Cars that do not complete at least half of the 22-kilometers do not score points.

**Cost Analysis: (100)**
Teams must prepare a report detailing the total cost of the vehicle, excluding R&D and capital expenditures (plants, machinery and tools).

**Business Plan Presentation: (75)**
This event evaluates the team’s ability to deliver a quality business plan. The car must be presented to executives of a firm in request for a donation. The target market is a hypothetical weekend autocross enthusiast (most commonly a Sports Car Club of America (SCCA) member).
Sponsorship Value Proposition

“So how does this benefit me?”

**Everywhere RIT Racing goes, so do you!**

**Racecar:**

Perhaps the most basic and effective form of advertisement is the racecar itself. RIT is one of the few American teams to compete internationally. In the past we have attended competitions in Detroit, Michigan; Lincoln, Nebraska; Germany, Austria, England and Australia. With our car spending much of its time traveling to these three continents, sponsors have gained tremendous international exposure.

**Teamwear:**

Sponsors are also displayed on team clothing including a variety of shirts and jackets. Each year a dedicated sponsor shirt is produced including all of our partners. Team members, friends and family wear shirts during on-campus testing and off-campus competition events. Exposure is extensive and frequent.

**Website/Social Media:**

RIT Racing’s online presence is closely followed. Sponsor graphics will circulate through the home page and will be listed under the sponsor page of the site along with a hyperlink to the sponsor’s website. Sponsors are also mentioned on RIT Racing’s social media platforms, including Facebook (over 5000 likes), Instagram, Twitter and Snapchat.

**Publications:**

RIT Racing has been publicized in popular automotive magazines such as Car and Driver, Race Tech and Design News. Prominent sponsors are also mentioned in features from RIT’s University News Services, the official communications entity of RIT.

**Giving to RIT:**

RIT recognizes donations made to university student clubs such as RIT Racing. We encourage you to visit http://www.rit.edu/development/giving/ for a complete explanation of how your donation will be recognized by RIT. RIT Racing, as an extra-curricular organization at the Rochester Institute of Technology, is a recognized 501(c)(3) organization under United States IRS tax code.
Sponsorship Level Breakdown

The following list is a breakdown of sponsorship levels along with a brief description of associated benefits. The sponsorship level may be obtained either through monetary donation or through in-kind donation of materials, products or services. Category exclusivity can be arranged with special consideration. We invite you to share your sponsorship questions with us at formula@rit.edu.

**Platinum Sponsor ($7500+)**

Platinum Sponsors receive maximum-sized logo placement on the cars and team website. Your logo can be incorporated into or influence the total livery (paint scheme) of the car. Sponsors will also receive logos placed on all teamwear produced for the year and will receive maximum engagement on social media and RIT campus-wide advertising. Sponsors will be invited to provide deliverables and posters for display and handout at RIT campus events and off-campus race weekend events. Sponsors are also invited to drive the vehicle at RIT Racing’s sponsor test day.

**Elite Sponsor ($5000)**

Elite Sponsors receive large-sized logo placement on the car, in addition to top placement on the RIT Racing website. Sponsors will also receive logos placed on all teamwear produced for the year and will receive frequent engagement on social media. Sponsors will be invited to provide deliverables and posters for display and handout at RIT campus events and off-campus race weekend events. Sponsors are also invited to drive the vehicle at RIT Racing’s sponsor test day.

**Gold Sponsor ($3500)**

Gold Sponsors receive medium-sized logo placement on the car, as well as placement on the RIT Racing website. Sponsors will also receive frequent mention on social media platforms. Logos will be included on T-shirt merchandise. Sponsors are also invited to drive our vehicle at RIT Racing’s sponsor test day and will receive a T-shirt representing this year’s car.

**Silver Sponsor ($1500)**

Silver Sponsors receive a logo on the car, as well as placement on the RIT Racing homepage and mention on social media platforms. Logos will be included on T-shirt merchandise. Sponsors will also receive a T-shirt representing this year’s car.

**Bronze Sponsor ($500)**

Bronze Sponsors receive a name on the car, as well as placement on the RIT Racing homepage and mention on social media platforms. Names may be included on t-shirts (space permitting), and Bronze Sponsors will receive a T-shirt representing this year’s car.

**Contributor ($100 - $499)**

A contributor receives a name on the RIT Racing homepage and will receive a T-shirt representing this year’s car.