# 

# Racing for STEM

# Need

An acronym for Science, Technology, Engineering, and Math education, STEM encompasses four of the essential areas of learning that are deeply intertwined in the real world. In STEM, these curricular areas are linked, as each discipline offers the essential skills and knowledge base for student success and to promote efficient learning.

In the Technology sector alone, the national unemployment rate is currently 4.2%. Specifically in the areas of Computer Programming and Computer Systems Analysis, the national unemployment rate is less than 2.5%. Currently, there are over 500,000 open technology jobs across the nation, a number that is predicted to grow to over 1 Million within a few short years.

Many organizations in the Charlotte region are struggling to fill the current need for workers in STEM related fields, the result of which is impeding organizations to fulfill their business needs; in some cases, it’s even stifling potential organizational growth.

Many leaders in Charlotte believe that the future of this region’s economic growth and sustainability will be in the technology and energy sectors. However, due to a large dependence on STEM centric talent, new workers must be trained or relocated to support this anticipated economic development.

In order to sustain long-term growth in our region, there needs to be a commitment to a long term solution, which starts with engaging our youth in STEM related careers. Studies show that the best time to attract children to a STEM related career is in the middle school years, which is the basis for the Racing for STEM Initiative.

# Purpose

The purpose of the Racing for STEM Initiative is to bring awareness of careers in the STEM field through real-world engagement. Through the use of a racing program, this initiative provides an interactive opportunity for students to realize the diversity of career opportunities that fall within the STEM sectors.

When speaking with middle school aged children, it can be challenging to capture their interest or to show real examples of exciting careers. Many have the misunderstanding that a STEM career will be boring, even though many STEM related jobs cross over to creative jobs, such as marketing, graphic design, and data analytics.

With limitless opportunities for hands-on activities, tours, speakers, and video demonstrations, racing enables our youth to have a better understanding of how basic STEM principles are applied. Ultimately, the Racing for Stem Initiative provides a well-rounded approach to bringing awareness of STEM careers to the future workforce, in turn proactively and positively impacting future STEM talent needs.

# Initiative Specifics

Racing for STEM will be a partner of Fread Racing and will utilize the Fread Racing team for all hands on activities. During the school year, we will be performing the following types of activities:

* **Middle School Job Fairs**: Students can get a glimpse of the world of racing by seeing firsthand a car and its equipment. They will also learn basic principles, such as shocks, weight, wedge, aero dynamics, safety, etc.
* **In-Class Demonstrations:** Members of our team will join classrooms and speak directly to the students about the initiative. There will also be opportunities to show videos of STEM concepts as they relate to racing.
* **Faculty and Administration Education:** Members of our team will speak with teachers and administrators to provide information that can be shared within the classroom.

Topics may include:

* Physics and Racing
* Math and Racing
* Technology and Racing
* Gravity, Friction and Force
* Caster, Camber and Toe
* Shocks and Springs
* Safety
* Weight adjustment, wedge
* Basic car setup and how everything works together
* Highlight different career options

As the program evolves, many activities will be added, and we will always be looking for new, creative ways to promote awareness. One of our goals is to reach students that are currently unaware, as well as students that are excited about pursuing a career in a STEM related field. These activities could include:

* Bringing a car and speaking with Boy Scout and Cub Scout groups
* Bringing a car and speaking at local STEM camps and other groups
* Having students visit a race shop to work on a car
* Having students visit the track and come into the pit area
* Organizing field trips / open houses at local NASCAR race shops
* Meeting with Principals and Teachers to encourage their support in promoting awareness. This would include providing them with the tools needed to engage their classes, such as videos and existing programs.
* Collaborating with other groups such as IT-oLogy and Connect a Million Minds to promote awareness through their networks.

One goal is to make the kids feel that they are part of the Fread Racing team. Through the utilization of a weekly blog and frequent social media updates, the students will be able to track the team’s progress and will be informed on the updates made to the car, as well as how these updates affected the results. Additionally, participants will receive a Fread Racing T-shirt, a driver’s card, and, best of all, they will be invited to attend races and visit the team in the garage area.

# Sponsor Benefits

In order to generate awareness of a STEM career, as well as provide a working race team that can be utilized for the initiatives, funding will be required.

Unfortunately, fielding a competitive racecar, even at the level at which we participate, does require an investment. To be competitive, it takes a team of people to maintain the car, set up the car, and service the car at the track, in addition to fund testing sessions, new tires, engine maintenance, etc. In order to effectively implement the program, and to entice participants with improving results, it is imperative that the car utilized is considered competitive.

In addition to the costs associated with the racing component, there are also funding needs for program development and execution, including promotional materials and takeaways for the participants.

Racing for STEM and Fread Racing are looking for sponsors who are able to help with the cost of fielding a car, as well as fund the ability to execute the STEM initiative. For the sponsorship to truly benefit both parties, we must work together, which is why we are seeking sponsors who are willing to enter into a partnership with Fread Racing.

With racing at the heart of our region, much of the sponsorship reach will be concentrated in Charlotte and the surrounding areas. Our goal is to represent our sponsors on and off the track in order to reach our existing sponsors and potential customers. With this considered, we will work with each of our partners to create a unique sponsorship package that will accommodate their needs. Sponsorship incentives include, but are not limited to, the following:

* Visibility at all Racing for STEM events to include:
  + Promotional Events
  + In-classroom Events
  + Races
* Logo on the Racing for STEM car
* Sponsor mention during racing events
* Mention on MAVTV, a weekly national highlight broadcast series
* Driver mention during winner’s interview (when applicable)
* Social Media promotion
* Promotion in locally syndicated press releases

Below is an overview of the sponsor levels and what is included with each level:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Title** | **Associate** | **Event** |
|  | **$10,000** | **$5,000** | **$1,000** |
| **Logo on Trailer** | X |  |  |
| **Logo on Car** | X |  |  |
| **Logo on Driver Uniform** | X |  |  |
| **Public Relations - All event PR announcements to the press and media** | X |  |  |
| **Online Logo Placement - Blog, Newsletters, Emails** | X |  |  |
| **Recognition at all STEM events** | X |  |  |
| **Speaking Opportunities at all Events** | X |  |  |
| **Logo on all collateral - handouts, t-shirts** | X | X |  |
| **Hosting of Car at Sponsor related events (STEM or not STEM)** | X | X |  |
| **Recognition at specific event - Logo, collateral, opportunity to speak** | X | X | X |
| **Recognition in advertisement for specific event** | X | X | X |
| **Represented on Website and Facebook Sponsor section** | X | X | X |

A yearlong plan will be created to tie the sponsor with the specific STEM initiatives as they are planned and delivered. As supporting partners, sponsors will be encouraged to participate in the initiatives as well as attend racing events. We believe that this is an invaluable opportunity for many organizations to assist in fostering the future economic development of our region, along with the development of the technology industry. For more information about sponsoring Racing for STEM, contact John Fread at [johnf@logicaladvantage.com](mailto:johnf@logicaladvantage.com).