



California State University, Northridge  
2019-2020 Formula SAE Team  
fsae20.finance@gmail.com  
www.ecs.csun.edu/sae

## MATADOR MOTORSPORTS SPONSORSHIP PROPOSAL

Each year, California State University, Northridge's Formula SAE team - Matador Motorsports - designs, builds, tests, and competitively races a single-seat open-wheel race car. This in-depth and hands-on educational program develops the knowledge, creativity and problem-solving abilities of engineering students by enabling them to draw upon their years of education to answer a complex, real-world design and manufacturing challenge. Matador Motorsports attracts some of the most hardworking, motivated and results-oriented engineering students produced by CSUN.

This season's competition will be June 17-20, 2020 in Costa Mesa, California where we will be up against 80 other schools. Matador Motorsports has performed competitively throughout our history - 12<sup>th</sup> place overall in 2016, 7<sup>th</sup> in 2007 and 2017, and 6<sup>th</sup> in 2018 in Design Category. This was due to our vehicle weighing in as the lightest at 330 lbs - a full 50 lbs lighter than the next competitor. Our foundation is strong and we intend to improve our performance dramatically at the competition this year, aiming for a top 5 position overall. Additionally, we are expanding our program this year to include a second vehicle, this one entered into SAE's Electric Vehicle competition. The electric vehicle program will gain dominance in the near future and we will be developing a model for that design process here at CSUN during this year.

The resources necessary to design, manufacture, tune, and train to be competitive are immense. We have estimated that a total budget of \$140,000 is required to create both an internal combustion and electric vehicle with the capability to place in the top 5. While the University graciously provides \$24,000 to the team, that leaves Matador Motorsports with a substantial \$116,000 to raise. This is why we are reaching out to you!

We hope to partner with you in this endeavor as your investment will contribute to maintaining an educational program of the highest quality. Additionally, this program is run through the CSUN Foundation, a 501(c)3 non-profit organization, making any cash or in-kind sponsorship a charitable donation. With this in mind, we humbly ask your consideration of the sponsorship opportunities presented on the following page. If you would like to discuss a custom sponsorship arrangement, please do not hesitate to reach out as we would be excited to discuss any possibility. Supplemental information including an example of last year's vehicle, a breakdown of the competition, and a description of our engineering facilities are included for your reference as well.

Thank you sincerely for your time and consideration.

A handwritten signature in black ink, appearing to read "Jacob Vorzimer".

**Jacob Vorzimer**  
**Matador Motorsports**  
Project Manager

A handwritten signature in black ink, appearing to read "Morgan Ryan".

**Morgan Ryan**  
**Matador Motorsports**  
Project Manager

A handwritten signature in black ink, appearing to read "Eduardo Caceres".

**Eduardo Caceres**  
**Matador Motorsports**  
Chief Financial Officer

A handwritten signature in black ink, appearing to read "Derek Mayfield".

**Derek Mayfield**  
**Matador Motorsports**  
Chief Financial Officer



California State University, Northridge  
2019-2020 Formula SAE Team  
fsae20.finance@gmail.com  
www.ecs.csun.edu/sae

## Sponsorship Packages

We are pleased to offer the following package options to our sponsors:

### **General Partner: \$500 Minimum Contribution**

- ☐ Tax-deductible receipt
- ☐ Small company decal on Formula race car (See following images for reference)
- ☐ Media publicity

### **Bronze Partner: \$1,000 Minimum Contribution**

- ☐ All Bronze Package options
- ☐ Team plaque of appreciation
- ☐ 2x Team T-shirts

### **Silver Partner: \$2,500 Minimum Contribution**

- ☐ All Silver Package options
- ☐ Medium company decal on Formula race car
- ☐ 2x additional Team T-shirts (4x total)
- ☐ 2x Team Jackets

### **Gold Partner: \$5,000 Minimum Contribution**

- ☐ All Gold Package options
- ☐ Large company decal on Formula race car
- ☐ 4x additional Team T-shirts (8x total) & 2x additional Team Jackets (4x Total)
- ☐ Publication of sponsorship at events
- ☐ Team Meet & Greet and Demonstration of completed Formula Racecar at sponsor's location\*

### **Platinum Partner: \$15,000+ Minimum Contribution**

- ☐ All Platinum Package options
- ☐ HUGE company decal on all sides of the Formula race car
- ☐ Representatives may drive the vehicle
- ☐ Company decal on team shirts.
- ☐ Promotional use of car for expos, company events, or display.

*\*Offer limited to sponsors located in Southern California, to be scheduled during Summer of 2020.*

Contributions of any amount will receive a tax-deductible receipt, social media publicity and the sincere gratitude of the entire team!

## 2017-2018 Vehicle Example



2017-2018 Matador Motorsports Formula car



2017-2018 Team at Competition



## The Competition

The three-day competition in Costa Mesa, CA contains two major categories for judging - Static and Dynamic.

### Static Events:

- 0 **Cost and Manufacturing Analysis:** A cost analysis report for a 1,000 vehicle production run is required to foster an understanding of the manufacturing budget related to the vehicle.
- 0 **Business Case Presentation:** A business presentation is performed to analyze the team's understanding of sales and marketing considerations that are involved in creating a vehicle for a target demographic.
- 0 **Engineering Design:** Evaluation of the design of the car as well as the team's skill in engineering practices.

### Dynamic Events:

- 0 **Linear Acceleration Event:** A 75-meter "drag race" style event.
- 0 **Skid Pad Event:** A figure-8 style course used to measure the maximum grip of the vehicle.
- 0 **Autocross Event:** Evaluation of the vehicle's agility on a tight single-run course.
- 0 **Endurance Event:** Evaluation of the overall performance and reliability of the vehicle on a 22-km track.
- 0 **Fuel Efficiency:** The vehicle's overall emissions are calculated based on fuel consumed.

## Our Engineering Facilities

The CSUN Mechanical Engineering facility has over 40 state-of-the-art computers, allowing the team to design and simulate the dynamics of an entire vehicle before it is built. The design of our race car is facilitated with the use of SolidWorks CAD/CAE, Fusion 360, Ansys CFD, Adams/Car CAE, Ricardo WAVE CFD, and Esprit CAM.

CSUN's Formula SAE is granted access to a machine workshop which is fully stocked with a conventional lathe, milling machines, and band saws. Additionally, The Gene Haas Lab has a Haas Automation VF-4ss 5-axis Vertical Mill, ST-20 4-axis Lathe, a TM-1 Toolroom Mill, and a Brother HS-70A Wire EDM. This infrastructure allows for a significant level of in-house manufacturing.

With these available resources and the expert guidance provided by the CSUN faculty, the students participating in this project have the capability to produce a vehicle worthy of a podium finish. It is the generosity of corporate and private sponsors alike that help our team succeed. Thank you again.