



# UW – PLATTEVILLE SAE BAJA



2022  
SPONSORSHIP PACKET

# Who Are We?

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The UW-Platteville Society of Automotive Engineers (SAE) Baja Team is a student run, student founded organization that offers its members the opportunity to gain hands on experience in designing and building an off-road vehicle for use in SAE international collegiate design competitions. The experience and teamwork skills our members gain help prepare them for a career in industry and engineering. These skills are fostered by engaging in practical engineering principles and the application of common manufacturing techniques all while working under tight deadlines and balancing strict budgets. Every season our members experience the entire engineering cycle, from design and manufacturing to testing and competition.



At the beginning of each academic year, our team begins to design a new vehicle entirely from scratch. The new design is based off the previous year's design. After each international competition, the members sit down and discuss what aspects of the vehicle that functioned well and what components need improvement. From that, the team sets specific goals and design criteria to achieve for the next year's design. This process allows for the team to easily and effectively track progress of the design and fabrication of the new car. The design team is comprised of seven subsystem captains: Chassis, Suspension, Drivetrain, Steering, Brakes, Body, and Ergonomics. These design captains must communicate effectively throughout the design process to ensure compatibility. When the vehicle is finished, our members gain the opportunity to not only compete on an international level, but also interact with and present their finished projects to professional engineers and other members of industry. This fosters networking skills and opens the door to many employment opportunities.

# What We Build

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First and foremost, our vehicles are designed for durable and reliable. On top of that, we strive for a design that is lightweight, maneuverable, and serviceable as possible. To compete with top teams from around the world, we try to maximize top speed while maintaining torque at low speed. Below is the vehicle our team designed and built for the 2019-2020 academic year.

## Chassis

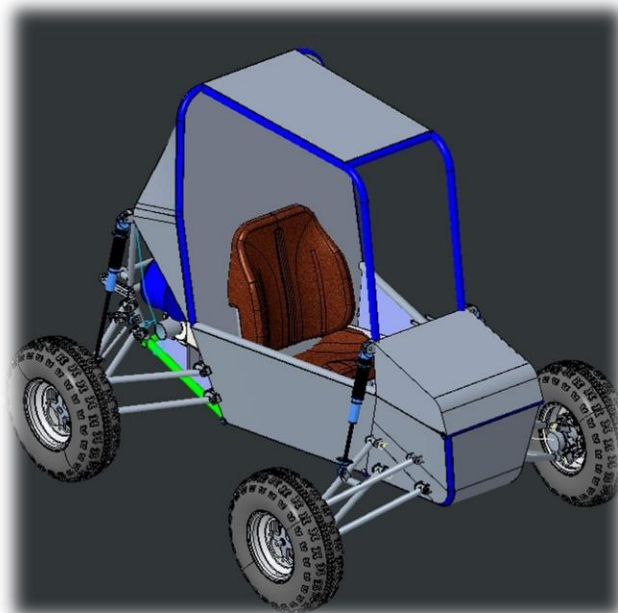
- Designed using PTC Creo Parametric®
- Fabricated out of 4130 Chromoly Tubing
- Encapsulates driver for safety
- ~59.2 lbs.

## Overall Vehicle

- Top Speed: 36 mph
- Weight: 430 lbs.
- Braking 30 to 0 mph: 2.4 sec
- MSRP: \$15,000

## Suspension

- Independent Suspension – Front and Rear
- AFCO 7" and 9" coil over shocks
- 14" of Suspension Travel – Front and Rear
- Integrated rear sway bar



## Steering

- Custom Spindles, Hubs, and Uprights
- Anodized aluminum tie rods
- Custom 3D printed steering wheel

## Controls

- Variable throttle control
- Custom brake pedal

## Drivetrain

- 10 HP Briggs and Stratton Engine
- Front differential for 4x4 integration
- Compact double-reduction gearbox
- Continuously variable transmission

# The Competition

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The object of the SAE competition is to provide our members with a project based on real-world applications that involve design, planning, and manufacturing tasks encountered when introducing a new product to the consumer industrial market. Teams compete against one another to have their design accepted for production by a fictitious firm. Students must function as a team to design, build, test, promote, and race a vehicle within the limits of the rules, all while managing their educational priorities and generating financial support for their project.

All vehicles are powered by a ten-horsepower engine manufactured by Briggs & Stratton Corporation. The use of the same engine by all the teams creates a more challenging engineering design test. The first day of the official competition kicks off with the design and sales events. The race portion consists of two days starting with four dynamic events – acceleration, hill climb, a maneuverability course, and a rock crawl course. The final day of competition consists of a four-hour endurance race that puts the cars durability and overall performance to the test.



*UW PLATTEVILLE TAKES TWENTY FIRST AT THE INTERNATIONAL SAE BAJA COMPETITION IN  
ROCHESTER, NEW YORK 2019*



# Why Sponsor Us?

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Sponsorship has many benefits, both for your company and for our team. For you, this is an opportunity to not only advertise your company and products, but also get your name in front of many of the best and brightest engineering students who are involved with SAE. The Baja SAE competition is an international event in which your company's name and logo will be proudly displayed in front of students and spectators. Throughout the year, our competition vehicles will be exhibited at various campus and community events. The team accepts monetary donations in any amount, product discounts and discounted services. Any contributions your company makes are tax deductible.

In the 2018-2019 season the UW-Platteville Baja team started off the Rochester competition against 100 other teams by placing 35<sup>th</sup> in the design presentation. In the dynamics events the team placed in the top 40 in maneuverability, acceleration and suspension shining especially in the hill climb, taking 25<sup>th</sup> place. In the very competitive grand finale, a four-hour endurance race, the team performed well finishing in 12<sup>th</sup> place. This placed Platteville 21<sup>th</sup> overall in the points standings for the competition. We hope to build on the success of the 2019 Rochester endurance race in 2021-2022 season. Coming new this year is an all-new concept, a 4 wheel drive car.



*UW PLATTEVILLE TAKES FIRST AT THE 2019 BACKWOODS BAJA COMPETITION*

*A MIDWEST REGIONAL EVENT HOSTED BY UW-STOUT*

	DIAMOND	PLATINUM	GOLD	SILVER	BRONZE
SPONSOR AMOUNT	\$10,000	\$5,000	\$2,500	\$1,000	\$500
*Incorporate Company Colors in Design Theme	✓				
Car Available for Promotional Events	✓	✓			
Large Logo on Team Shirt					
UPGRADE - XL 4"x4" / 8"x2" Decal	✓	✓	✓		
Receive Team T- Shirts	✓	✓	✓	✓	
Company Logo on Team Shirt LG 3"x2" / 6"x1" Decal	✓	✓	✓	✓	✓

*Tour of UW Platteville's SAE Facilities is included with every donation*

*\*Only for First Sponsor to Achieve Diamond Status for the Season*

*All Donations are 100% tax deductible*

# DONATION FORM

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Name/Organization: \_\_\_\_\_

Mailing Address:

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Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Email: \_\_\_\_\_ Website: \_\_\_\_\_

## MONETARY DONATION

Amount Donated: \_\_\_\_\_

(Please make checks payable to SAE Student Organization)

Mailing Address:     SAE BAJA  
                          1 University Ave.  
                          Platteville, WI 53818

## GIFT IN KIND

What is the nature of the gift in kind: \_\_\_\_\_ -  
\_\_\_\_\_?

Market Value of Gift: \_\_\_\_\_

How was the fair market value of the gift in kind determined? \_\_\_\_\_

Baja SAE is a 501(c) (3) organization is a tax receipt needed? Yes\_\_ No\_\_

Donation Signature: \_\_\_\_\_ Date: \_\_\_\_\_