

Baja SAE 2023-2024

PARTNERSHIP PACKET

About Us

Stony Brook Motorsports is an undergraduate student organization at Stony Brook University. Since 1987, the team has competed in Baja SAE, a real-world engineering design project sanctioned by SAE International (Society of Automotive Engineers). Students use the skills they learn in the classroom to design, build, test, and race an off-road vehicle.

For the rock crawl, one of the dynamic events at Illinois, vehicles must climb a hill covered in rocks, some as large as the cars themselves.

Hands-on Experience

The project takes students through a full design cycle: research, computer design and simulation, manufacturing, testing, and re-design. Students can gain skills in:

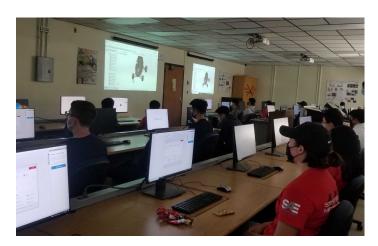
Design Students design the car based on new rules each year, using numerical analysis, 3D modeling software, and computer simulation software.

Manufacturing Students fabricate most of the car from scratch, including our custom gearboxes and suspension, using equipment including hand tools, manual mill and lathe, and CNC mill.

Electronics Students use an assortment of sensors during testing to acquire information such as acceleration, suspension travel, and component temperatures, to verify computer simulations.

Business Students give a sales presentation at competition, where they create and propose a marketing plan to make our car the sole supplier of a new BAJA Racing Series. Students also manage all the administrative and financial aspects of the project.

Students of all majors, years, and experience levels are welcome to join. Team members train and guide new members, from teaching introductory Solidworks lessons to organizing mock competitions. Our alumni recognize the positive impact Baja has had on them, volunteering their time and knowledge to advise us.



At one of our CAD lessons, students learn the basics of 3D modeling and simulation. They will use these skills to design and validate their own parts.



A new tubular frame chassis is created every year. Students notch and weld most of the tubes themselves in our machine shop.

2024 Preparations

After competing with our first AWD model in Oregon last spring, this year is going to be spent refining our design to enhance speed, reduce weight and improve overall dynamic event performance. In order to accomplish this, we plan on rigorously testing and analyzing our current AWD platform and using this data to inform any design changes.

This year we plan on attending the Williamsport event. This competition includes a 4 hour endurance race as well as a design and sales presentation, hill climb, suspension & traction and maneuverability.



We brought our car to Communiversity Day, an event where visitors of all ages learn about the university's programs and traditions. Members of the community loved hearing more about our organization and taking pictures with our car!

Recognizing Your Support

Each of our Baja SAE competitions is expected to be attended by over 2500 students, professionals, and onlookers. We also display the car around campus, give class presentations, and attend numerous other on-campus and community events. To show our appreciation, partners are recognized whenever possible.

Thank you for your time.

If you are interested, please review the enclosed partnership form. If you have any questions, our contact information is on the back of this packet.



The bright red body of our car (and the partners featured on it) are easy to spot in the muddy four hour endurance race at Rochester.



We presented our work to the mechanical engineering department's Industrial Advisory Board (pictured above), consisting of volunteers from companies including Brookhaven National Lab, Ford, General Dynamics, and Festo. We also shared our work at the URECA undergraduate research fair.





THANK YOU TO ALL OF OUR PARTNERS!





Department of Mechanical Engineering









D&I Finishing, Inc.







Mastercam.







Daniel Jones Henry Honigman
Lorena Rozo Noah Machtay
Jesse Jongebloed Joe Schurz
Christian Brutus Bob Martin





Please review the enclosed donations form and consider becoming a partner. To learn more about our team and ask us any questions:

Visit StonyBrookMotorsports.com

Follow facebook.com/StonyBrookMotorsports

Email StonyBrookMotorsports@gmail.com

Call 315-751-7171 (Abigail Karoglanian, President)



Stony Brook Motorsports 231 Engineering Building Stony Brook, NY 11794-2200



Partnership Form 2023-2024

How can you help?

Each year, Stony Brook Motorsports seeks to increase its skillset and acquire new technology, to expand educational opportunities and increase competitiveness. Costs include:

- Modeling, simulation, and analysis software
- Raw material, parts, and equipment
- Machine shop and outdoor testing facility maintenance
- Competition travel costs

Ways you can support the team as a partner include:

- Providing monetary donations
- Fabricating parts
- Donating or offering discounts on parts, material, services, and equipment
- Donating unneeded equipment

Monetary donations are tax-deductible to the full extent allowed by law.

Your generous support will help students gain important skills in engineering, teamwork, and leadership, and ensure that the team grows and thrives for future students to have the same opportunity. To show our appreciation, all partners are mentioned and/or displayed whenever possible at the events we attend. These are some of the additional ways we recognize our partners, depending on the donation amount (total of monetary and non-monetary donations):

Gold Level Partnership (\$1000+)

Logo prominently featured on banner, trailer, vehicle, and website Receive 3 team shirts All silver-level benefits

Silver Level Partnership (\$500-\$999)

Logo featured on vehicle and team shirt Receive a team shirt All bronze-level benefits

Bronze Level Partnership (\$50-\$499)

Logo featured on website
Photo prints of the team and vehicle sent after competition
Team logo decals
Tours of our machine shop, upon request
Periodic updates on the project sent to contact email

Interested?

To make a monetary donation:

For Checks (Preferred):

Payable to: Undergraduate Student Government at Stony Brook Trust and Agency

Memo: Motorsports Donation

Fill out the contact info below, and mail this form and the check to:

Stony Brook Motorsports 231 Engineering Building Stony Brook, NY 11794-2200

For Credit Card:

Visit the Stony Brook University Online Giving Page

Search for "CEAS Co-curricular Education Fund"

Indicate your desired donation amount and frequency of donation.

Email StonyBrookMotorsports@gmail.com to let us know it has been sent.

To discuss a non-monetary donation:

Email StonyBrookMotorsports@gmail.com or call 315-751-7171 (Abigail Karoglanian, President)

Donor Contact Info

Name	Title	Date
Company Name		
Street Address		
City	State	Zip Code
Contact E-mail	Telephone	