



BLUE JAY RACING

Johns Hopkins University

2021-2022
Sportsbook

About

Blue Jay Racing is the undergraduate Baja SAE team at Johns Hopkins University. Every year, we design, build, and race a custom, single-seat, off-road vehicle against more than 200 teams from around the world.



For 19 years, team members have been developing real-world skills by applying classroom theories to design and manufacturing challenges while building a car within budget, safety, and design requirements.

DESIGN



BUILD



Meet The Team



Lance Phillips
Captain



Ben Lehrer
CFO



Peter Klopp
Drivetrain Lead



Tyler Stanley
Frame Lead



Nina Tedeschi
Controls Lead



Theo DeGuzman
Suspension Lead



Blue Jay Racing is made up of 25 members and 35 active alumni. Our team is comprised of solely undergraduate members. New members learn to operate a lathe and mill, weld, and design components on the car regardless of their experience before they join the team.

WRECK



REPEAT



Our Season

June: Begin Design

July: Preliminary Design Review

August: Design Freeze

September & October:

New Member Recruitment & Training

18XT Testing and Validation

November & December:

Begin 18XT Manufacturing

January: Intersession

All hands on deck! Without full-time classes, we spend most of the month machining a majority of the parts.

February: Final Fabrication

Machine back-up parts and complete post-treatment, as necessary.

March: 19XT Testing and Driver Training!

With our competition-ready vehicle, we begin tuning and data collection.

April: Compete!

May: Compete!

June: Compete!



Competition

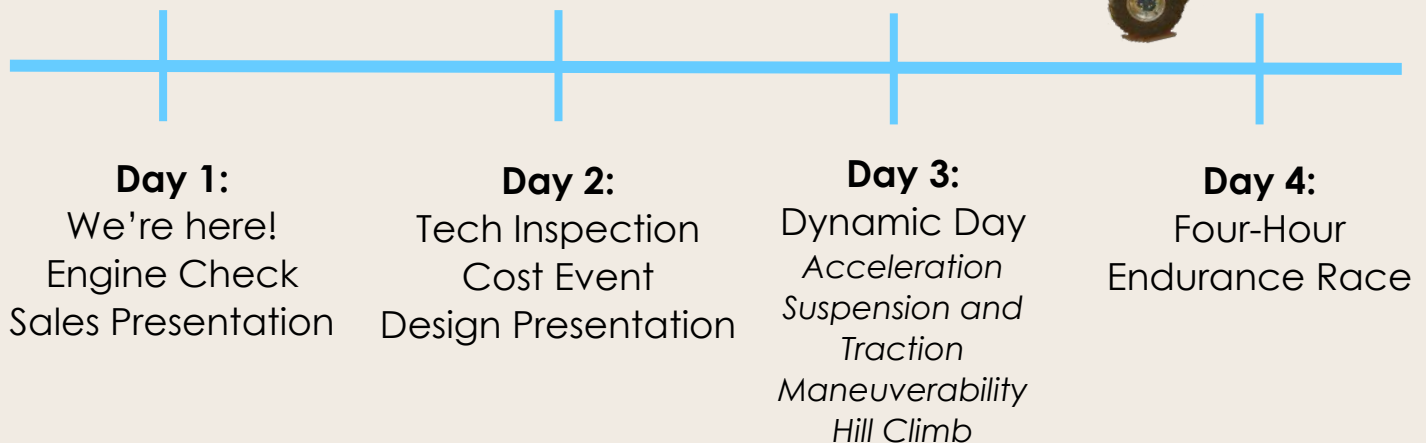
SAE International Collegiate Design Series – Baja

A design competition held across the United States, along with races in Brazil, India, South Korea, and South Africa, bring together 100 teams from around the world. Over 1500 students descend upon a town for 4 days of static and dynamic events.

The first two days of competition consist of Static Events, as well as safety checks and rules conformity, focused on the Cost Report, Sales Presentation, and Design Presentation. For Sales presentation, teams pitch their cars to a group of mock-investors for hypothetical mass production. Teams also present their designs to a panel of professional engineers who judge the depth and quality of the final designs of the car.

The third day of competition focuses on a series of dynamic events by time trial. Teams have two attempts at acceleration, maneuverability, and a combination of two of hill climb, sled pull, suspension and traction, and rock crawl. These events are designed to test the agility and robustness of the vehicles.

The competition culminates on the fourth and final day with a four hour Endurance Race that puts cars, drivers, and teams to the test. All 100 teams race together on a single obstacle-strewn track built to test the design, fabrication, and durability of the cars.



Past results

2022

Custom 4WD System

Tennessee

- 1st Design
- Completed Suspension and Traction Course

Rochester

- 2nd Design
- 24th Overall



2021

Custom 4WD System

Knowledge Event

- 11th Overall
- 4th Sales
- 17th Cost Event

Validation Event

- 30th Overall
- 17th Maneuverability



2020

1st 4WD Vehicle

- Data acquisition system implemented on 2019 and 2020 vehicles
- 15+ hours of off-road testing completed



Sponsorship

Blue Jay Racing relies on the generous support of our sponsors to build a successful car. Our sponsors give us the means or opportunity for machine time, parts, machining, post-treatment, and in some cases machine parts for us with machines we do not have access to.

Our sponsors allow us to be as creative as we can each be as we design our parts by giving us the capabilities to machine parts in ways we otherwise would not be able to.

Improving Education and Experience of Future Engineers

The education and experience of Baja has a large effect on the student's future engineering career. By investing in their education now, your company will have access to experienced potential new hires when members enter the workforce.

Community Support

Supporting the community around your business not only makes your company look good and gets your name out, but it also brings your company closer to customers. Showcasing your company's role in its community at a national competition broadens your customer base now and in the future.

As well as

Tax Deduction – we are a 501(c) organization

Recruiting visibility on campus

National visibility at competition through logo placement

Levels

PLATINUM

\$5,000+

- Tour of Hopkins Baja facilities
- Access to JHU Engineering Career Fair

GOLD

up to \$5,000

- Company name and logo on car's firewall
- Access to team Resume Booklet

SILVER

up to \$1,500

- Company logo on team apparel
- Company name and logo on car (medium)

BRONZE

up to \$500

- Company name on car (small)
- Company profile on social media

COPPER

up to \$250

- Company name on website
- Recognition on all presentations

We would like to thank all past and present sponsors. Their continued support and generous contributions make the continuation and success of Blue Jay Racing possible.



baja.jhu.edu



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[@hopkinsbaja](https://www.instagram.com/hopkinsbaja)



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