



# **PACK MOTORSPORTS**

*BAJA SAE at NCSU*



***2023-2024 Sponsorship Packet***



## *Who We Are*

At Pack Motorsports Baja SAE, we are a student run engineering design club at North Carolina State University. Every year we design and build a single seat off-road car from the ground up. We take our car to competitions sponsored by the Society of Automotive Engineers (SAE) to compete against 100+ universities from around North America. Involvement in our club involves engineering design, manufacturing, and business-related tasks which prepare students to be the best engineers they can upon graduation.

At NC State, our club represents 4 of 9 engineering departments and 5 of 16 engineering degrees. Primarily our club is made up of mechanical engineering students, but anyone is allowed to join. We also welcome students from outside of engineering, including business administration and graphics communication students.

At Pack Motorsports Baja SAE, all students who have an interest in offroad motorsports are encouraged to join. We boast about our welcoming culture, where students are not required to attend meetings or pay dues to be a member of our club. This allows us to foster a culture of inclusivity where students don't feel like they are competing against their peers, but rather feel encouraged to collaborate with friends.

As part of our team, students get to reinforce the engineering concepts and skills they learn in classes by applying them to real world scenarios and problems where there is no correct answer. We also provide and teach skills that go beyond the classroom. As part of Pack Motorsports, we teach students 3D modeling, finite element analysis, and manufacturing techniques and considerations. Students also learn how to make a Bill of Materials, manage a budget, and organize design reports. Most importantly, as part of Pack Motorsports Baja SAE students learn how to collaborate and work within a team, preparing them for engineering project teamwork in their careers.



# *What We Do*

In Baja SAE, engineering students are tasked with designing and building a single-seat, all-terrain sporting vehicle that is to be a prototype for a reliable, maintainable, ergonomic, and economic production vehicle that serves a recreational user market. The students must function as a team to design, engineer, build, test, promote, and compete with a vehicle within the limits of the rules.

At Pack Motorsports, we bring students from a diverse set of backgrounds together with the goal of not only designing a car that can dominate the track, but also innovates year over year, pushing the limits of what is Baja. With every year we refine our designs, while incorporating features researched by our subsystems, as well as a capstone project developed by our senior members as part of their senior design project. We are always looking for new areas that we can improve our vehicle, both from a design and execution perspective.



# 2023 Competition Results

## Oshkosh, WI

- 12 Overall
- 5 in Endurance
- 5 in Acceleration
- 9 in Maneuverability
- 14 in Suspension
- 27 in Sled Pull

Note: Results out of 78 teams

## Washougal, WA

- 12 Overall
- 9 in Endurance
- 6 in Acceleration
- 13 in Maneuverability
- 16 in Rock Crawl
- 12 in Hill Climb

Note: Results out of 86 teams



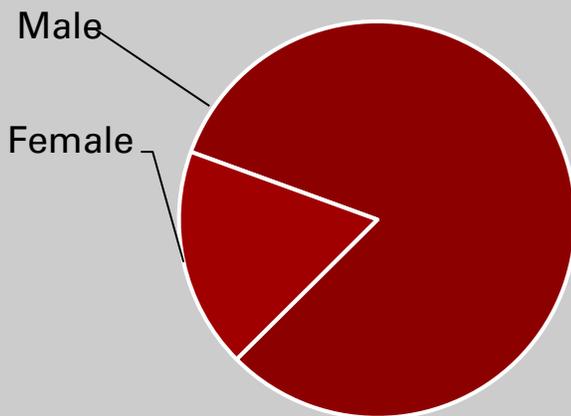


# Budget

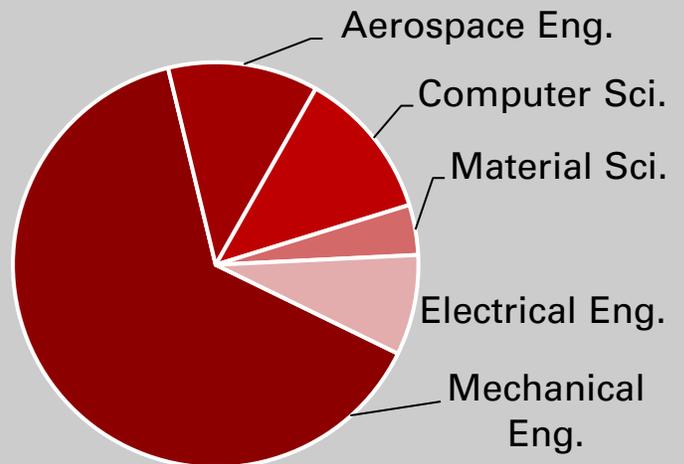
SAE Fees	\$3200
Competition Costs	\$15138
Machining and Tools	\$3547
Shop Maintenance	\$2091
Frame	\$1984
Drivetrain	\$6505
Suspension	\$4060
Steering	\$1253
Electronics	\$2090
Ergo and Composites	\$6319
Total	\$46187



# Demographics



Genders



Majors



# Sponsorship Levels

	Partner \$100+	Bronze \$500+	Silver \$1000+	Gold \$3000+	Platinum \$5000+
Tax Benefits	■	■	■	■	■
Name and Logo on Website	■	■	■	■	■
Name on Competition Car	■	■	■	■	■
Logo on Competition Car		■	■	■	■
Name and Logo on Apparel		■	■	■	■
Access to Team Resume Book		■	■	■	■
Tour of our Shop			■	■	■
Recruitment Opportunity at our Shop			■	■	■
Social Media Highlight Post				■	■
Invitation to Track Days				■	■
Complementary Apparel				■	■
Company Media (Video, Photo Op, etc.)					■
Priority Logo Sizing and Placement					■

## Tax Benefits

- As a 501(c)(3), any donations received are considered tax deductible!

## Track Days

- We would love to see our sponsors at track days and will keep you informed of when and where they occur!

## Complementary Apparel

- You will receive Pack Motorsports apparel! This varies year-to-year but in the past, there have been shirts, hats, jackets.





# *Contact Us*



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