



Southwestern College's Baja SAE Team

Sponsor Handbook

2023-2024

About Us

The Southwestern Jag Racing Team has dedicated significant effort in uniting as a team for the first time, with the goal of designing and building a vehicle that complies with the regulations of the 2024 Baja SAE Collegiate Design Series.

Being the only Community College in competition, our team is uniquely comprised of a diverse group of dedicated engineering students from various backgrounds, age groups, and experience levels. Within this environment, students are encouraged to collaborate, share knowledge/experiences, and gain experience with automotive engineering practices.

The students participating in Baja SAE are responsible for every aspect of creating the Baja Vehicle, from designing and manufacturing to assembly and testing. The Baja SAE 2024 Competition also requires teams to develop a production plan and present it through a Request for Proposal as a thought experiment, engaging students closely with automotive industry business practices.

Chassis Team

Collin Archer
Jose Becerra
Carolina Davalos
Jesse Sharma
Maxwell Weaver
Nicolas Yojimovich

Computer-Aided Design Team

David Aragon
Gregory Fangon
Estepan Lopez
Oscar Sumaya

Electrical Team

Lance Brown
Victoria Lopez-Villa
Marc Jones

Materials & Finance Team

Adrian Contreras
Arleth Lizarraga
Maria Tamayo

Power Train Team

Ameko Birdsall
Daniel Butron
Brandon Dominguez
David Jazo

Fermin Martinez
Scott Roman
Luis Sandoval

Project Management

Kayla Racelis

Southwestern Faculty

Contacts

Greg Howe
Dmitry Kalantarov
Brian Palmiter

Our Mission

The Jag Racing team mission is to engage in the same level of research, development, and responsibility as our competitors from universities in the static and dynamic competition events.

The static events include a design evaluation, cost evaluation, and business presentation following the prompt given in the 2024 Baja SAE Business Presentation Event Description and Guideline. Our goals during the static events involve assessing the effort put into engineering our design to fit the intent of the market, showing the cost decisions made during the design process with information on future cost reduction opportunities, and concisely presenting our solutions to the Presentation Event prompt.

The dynamic events include assessments on acceleration, traction, land maneuverability, suspension, and endurance to test how our vehicle performs under a variety of conditions.

Additionally, our vehicle is designed and will be built to comply with the technical and safety requirements mandated by Baja SAE.

Our team is not only focused on our performance at the 2024 Baja SAE Competition, but the continuation of the Jag Racing Program at Southwestern. We aim to represent our school to the best of our ability and connect with sponsors to pass on this opportunity to future students interested in automotive engineering and manufacturing.

Static Events

<i>Design Evaluation</i>	150
<i>Cost Evaluation</i>	100
<i>Business Presentation</i>	70
<i>Total Points:</i>	320

Dynamic Events

<i>Acceleration</i>	70
<i>Traction</i>	70
<i>Land Maneuverability</i>	70
<i>Suspension</i>	70
<i>Endurance</i>	400
<i>Total Points:</i>	680

Proposed Timeline

Vehicle **design** begins during the Fall Semester. Students research parts and materials using cost analysis and the Baja SAE Collegiate Design Series Rules to choose parts to order and manufacture.

Design

Manufacturing occurs in the Winter, which includes in-house machining, welding, and composite manufacturing. **Assembly** of the vehicle will take place soon after, at the start of the Spring Semester.

Rigorous **testing** begins in March, during which team members will use the Baja Tech Sheet as a reference for our vehicle. Technical inspections, safety checks, and driver training will occur at this time.

Build

Test

Competition will take place from April 25-28. Our vehicle and accompanied materials will be assessed and scored.

Compete

Projected Budget

Manufacturing Expenses

Chassis	\$3,100
Powertrain	\$4,485
Electrical	\$495
Total	\$8,080

Competition Expenses

Competition Fees	\$1,700
Transport	
Lodging	
Total	

Sponsorship

	Silver \$500+	Ruby \$1,000+	Gold \$5,000+	Diamond \$10,000+	Sapphire \$15,000+	Platinum \$25,000+
Name & Logo on Website	✓	✓	✓	✓	✓	✓
Name & Logo on Printed Materials	✓	✓	✓	✓	✓	✓
Name & Logo on Vehicles		✓	✓	✓	✓	✓
Name & Logo on All Clothing			✓	✓	✓	✓
Company Banner at Events				✓	✓	✓
Complimentary Team Apparel					✓	✓
Special Appearances at Events						✓

The Southwestern Jag Racing team is part of Southwestern College Foundation which is a 501(c)(3) non-profit organization which means all donations are tax-deductible.

For general inquiries, please contact kracelis@swccd.edu.