UNIVERSITY OF ILLINOIS

OFF-ROAD ILLINI

SPONSORSHIP PACKET

2020-21
We are an interdisciplinary engineering RSO that designs and manufactures an off-road vehicle to compete in competitions. Our members learn how to utilize a 3D modeling software known as PTC Creo to model our vehicle. We also use simulation software such as Ansys FEA to validate our design and model how the car will perform in a competition environment. This allows us to make any necessary design changes. After the design phase, our members obtain hands-on manufacturing experience and can even get trained in specialized skills such as machining, welding and water jetting. This goes on for the rest of the academic year, until we get to get and then the vehicle is put to the test in an international competition.

This program helps prepare members for a career after college. The skills gained from competing on an SAE student design team are numerous and unique. These opportunities help emerging engineers develop a real-world understanding of communication, teamwork, and leadership in a professional context.
We are so proud of our team’s diversity. We have members that come from all disciplines of engineering: from mechanical and civil to aerospace and computer science. Each of these different backgrounds help give our team unique skills and experiences to help our team succeed. Not only do we have different academic backgrounds, but our team also has very different backgrounds in life. Working in this diverse environment helps expose our team members to working in teams. We are also incredibly proud to have a high percentage of female participation, with just under half of our leadership being female.

**OUR TEAM**

The people behind the product

Louisville 2020

8th of 60 Overall - 2nd of 48 in Design - 15th of 50 in Sales
Baja SAE is a collegiate design series sponsored by the Society of Automotive Engineers (SAE) and Briggs & Stratton in which students apply their knowledge acquired in the classroom through the design, manufacturing, and testing of a prototype vehicle. This prototype is developed around the concept of a four-wheel, single-seat, off-road recreational vehicle intended for sale to the non-professional, weekend off-road enthusiast. The vehicle is required to be safe, easily maintained, easily transported, and fun to drive with the added challenge of being limited to a stock ten horsepower engine from Briggs & Stratton. This places an emphasis on driveline efficiency, and suspension and chassis design.

As with everything nowadays, Baja must adjust to life during the pandemic. Events that can be held virtually will be, and those that can’t, will follow modified guidelines. The two types of events are static and dynamic. All of the static events this year are to be held virtually. In static events, students explain their design decisions and how they help to achieve the lowest build cost. They additionally develop a theoretical business plan for producing these cars. Dynamic events are more difficult to modify for this year. The biggest change is that teams will only be able to compete in one of the three main competitions. Additionally, the competitions this year may be split up into multiple “heats” broken up over several days, reducing the size of the gathering further. The events themselves are expected to remain the same as usual: teams will compete with their vehicle on many different types of terrain including rocks, logs, dirt, grass, sand, mud, and hills. The competition ends with all competitors (previously up to 100) racing head to head in a grueling four hour off-road endurance race.
GOAL OF THE COMPETITION

Shoot for the moon...

The goal of the competition is to give students an experience emulating a professional business and engineering environment. Our members learn valuable skills such as: working effectively in a team, creating and meeting deadlines, and designing a product with quality and efficiency in mind. A prototype of the car will be modeled and thoroughly checked by analysis software before fabrication begins. Baja SAE competitions place a large emphasis on the maximization of performance and minimization of cost in both the design and implementation of a vehicle. This not only teaches students how to build a strong and reliable vehicle, but it helps them gain experience solving problems in a real-world engineering setting.

DESIGN FOR SUCCESS

... and land amongst the stars

Through years of competition, with the aid of detailed documentation of our previous designs, the UIUC Baja SAE team has optimized their vehicle design using the lessons learned in competition as well as industry trends. We are shifting our direction for the 2021 car to 4WD as that SAE rule change will be permanent for the 2021-2022 season. This change adds new complex drivetrain components such as our new front differential and redesigned gearbox. The student-designed vehicle has custom independent front and rear suspension, and is designed to be light but still capable of handling the grueling courses of the Baja events. Some of our goals for the year include efficient drivetrain packaging of new components and keeping a lightweight chassis that still meets the strict safety standards.

2020-2021 Season Goals
Design an all new functional four wheel drive
WHY SUPPORT BAJA SAE?

Why you should get involved

Any company supporting the University of Illinois’ Baja SAE team shows great value and receives great benefits. You will have an opportunity to form relationships with students from one of the country’s top mechanical engineering programs and have direct access to this talent. Our partners are always welcome to come to the shop and see our cars, and can give recruiting presentations directly to our team. Our teammates are always eager to meet sponsors and tell them more about our Baja SAE program, and will be just as excited to hear about your company’s opportunities.

Baja SAE partners are companies that have the highest values. Supporting students who are working outside of class to gain professional, real-world engineering and competition experience while improving their project management, teamwork, and engineering skills is a great outreach for any company. Not many other students graduate with hands-on designing, engineering software, and manufacturing experience, so partnering with Baja SAE students shows that your company prides ambitious talent.

The Off-Road Illini are placing better and better in each competition we go to, and we wouldn’t be able to get to that next level without our corporate sponsors. Our resilient drive and motivation give us that competitive edge, but as we develop and grow each year, we continue to need more sponsors. Being a partner helps our team continue to be ambitious and dream of innovative new ways to improve our car.

We thank every corporate sponsor for your thoughtful consideration. It is because of you that our team continues to get bigger and better! The Off-Road Illini Baja SAE team would not be able to thrive the way it does without our sponsors.

2020-2021 Season Goals

Finish Top 5 in Design Presentation
CONTACT OUR LIAISONS FOR MORE INFORMATION

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Instagram: instagram.com/offroadillini

2020-2021 Season Goals
15 hours total car running time before competition
## Sponsorship Levels

<table>
<thead>
<tr>
<th>Levels of Representation</th>
<th>Honorary Member</th>
<th>Bronze Partnership</th>
<th>Silver Partnership</th>
<th>Gold Partnership</th>
<th>Platinum Sponsorship</th>
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<tbody>
<tr>
<td>Representation on Team Website (Includes Link to Company Website)*</td>
<td>Up to $500</td>
<td>$500-$999</td>
<td>$1,000-$4,999</td>
<td>$5,000-$9,999</td>
<td>$10,000+</td>
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<td>Two Large Logos in Location of Sponsor’s Choice</td>
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<td>Sponsor Newsletter Subscription</td>
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<td>Team Photo and Appreciation Letter</td>
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*Logo appears on the website once the donation is received. If the donor is a current sponsor renewing their sponsorship, one additional year will be added starting at the time the new donation is received. If a 2020 sponsor chooses not to renew their sponsorship, logos will be removed from the website on January 17th, 2021.

On behalf of the Off-Road Illini, thank you for your support!