

What is SAE?

The Society of Automotive Engineers (SAE) is an international engineering society established to "further develop mobility on land, in air, and in space." Included in the members of SAE are industry leaders and workers from all areas of the transportation industry, as well as thousands of college students from around the world. The student branch of SAE at the University of Wisconsin Platteville has established a well-structured organization, which provides many opportunities for its members to design and build on-road and off-road vehicles for use in SAE sponsored competitions. Members learn hands-on skills, as well as effective team working strategies that will be essential to succeed in industry upon graduation. SAE at UW-Platteville has remained one of the largest and most active organizations on campus. Members engage in practical engineering, learn complex manufacturing techniques, and feel the pressure of working under deadlines and strict budgets. Best of all, members receive great satisfaction in seeing their designs make the transition from paper to working machines, which consistently finish near the top at competitions.



The Mini-Baja Competition

The Mini-Baja international competition challenges college students to design, fabricate, and race a miniature Baja style off-road vehicle. Rule guidelines place restrictions on the engine and frame, testing the imagination, knowledge, and creativity of the students. The vehicles are judged through both dynamic and static events. Students design the Mini-Baja car as if it is a prototype for a company, so cost, appearance, reliability, and performance all become key factors in judging. This competition, like all SAE competitions bring students together from not only across the country, but from around the world. Last year's competition was held in Burlington, WI at the MGA Automotive Research Facility.

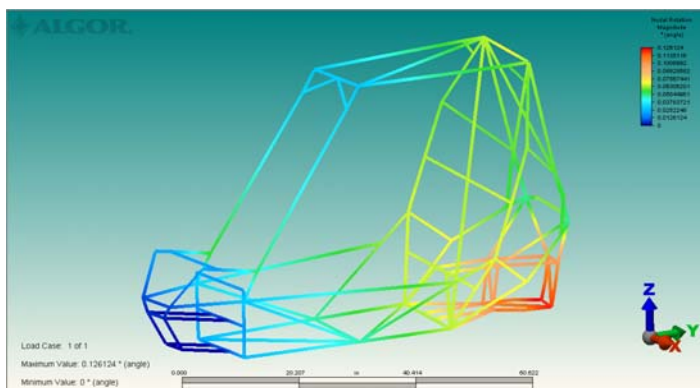


Mini-Baja at UW-Platteville

The Mini-Baja team was the first SAE team at UW-Platteville, having started in 1984. The UWP Mini Baja team has always been, and will continue to be a team who enjoys trying new and innovative engineering techniques. After building a very sleek and innovative car during the 2008-2009 school year, we went on to international competition at the MGA Automotive Research Facility in Burlington WI. We finished in 35th place out of 120 teams, which was a huge improvement upon the previous year's 72nd place finish (also against 120 teams). From our success at the 2009 competition, we were able to start establishing a plan for this year, and further refine the Mini Baja program at UW-Platteville. We are already looking forward to improving upon our rank at the 2010 competition. Our main goal for the 2010 competition is to build a completely new vehicle and place in the top twenty five teams. Although this is an ambitious goal, we are confident we can meet it.



Highlights of our plan for this year include making the overall weight of the car less through further analyzing forces acting on the chassis and suspension components, refining the suspension and steering setup for improved maneuverability and handling, and decreasing drive-train losses through



a custom integrated differential and gear reduction. Through further analyzing all the possible forces on the chassis, it is then feasible to use less material in those areas that do not require as much support, internally making the car lighter. There will also be extensive analysis into improved handling

through steering techniques and suspension types. The last major part on the plan for this year is to integrate the differential into the gear reduction to simplify the drive-train. Simplified components will not only result in less power loss through the drive-train, it will reduce weight and improve reliability as well. We are also enthusiastic to custom design the differential and gear reduction, because it is a great opportunity to learn more about design and CNC manufacturing. Those are just

a few of the major improvements we are hoping to implement in our Mini Baja car this year, utilizing the support of individuals and companies such as yours.

The 2009-2010 Mini Baja car is estimated to cost approximately \$7000 to design and build.



Why Sponsor UW-Platteville SAE Mini Baja?

The Mini Baja team has had a long and successful history with the University of Wisconsin Platteville SAE team. However, funding for such a large organization is limited, and the costs of parts, construction, and transportation is more than our organization can produce on its own. Thus, we are asking for sponsorships in the form of monetary donations, part donations, discounts, or any other type of donation you or your company is willing to provide to help us succeed.

As a sponsor of the UW-Platteville SAE Mini Baja team, your company logo will be placed on our



web page and displayed on our competition vehicle. The competitions we attend are international events. Your logo will not only be visible to people in your hometown, it will be visible to people from all over the world. In addition to company publicity, your donations will aid in the education of future engineers. Students in our program are able to benefit greatly from the hands-on experience they gain from the realistic engineering opportunities the SAE Mini Baja competition has to offer.

All donations are tax deductible, and anything you can do to help us reach our goal is greatly appreciated.

Pictures



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