



FORMULA SAE Electric – URGENT NEED FOR VOLUNTEERS

Teams are asking SAE International to expand the Formula SAE Electric competition – DEADLINE – October 28, 2015

On October 8, 2015, registration opened at 10:00 am for 20 teams for the 2016 Formula SAE Electric competition and within 7 minutes, registration was sold out. However, there are 16 teams on the waitlist and many are pleading with SAE to open registration beyond the 20 maximum.



SAE International needs volunteers for Formula SAE Electric competition

In order to increase from 20 teams to 40 teams for 2016, SAE is needing individuals that can commit to volunteering for the students of this competition. Please read the attached plea from just one of the teams that is on the waitlist.

What does this volunteer role look like?

- **Document Review of Electrical Systems Form (ESF) and FMEA** – Work with teams to review their design and find areas of non-compliance with the rules or areas for improvement. Approximately 40 hours over the course of January-April with 20 of those hours in January for initial review of the required documents – ESF and FMEA forms
- **Technical Inspection** – onsite at Formula SAE Electric, Lincoln, Nebraska June 15-18, 2016. Work with a team of inspectors, led by the Chief Inspector to review the 'as built' vehicle for compliance with rules according to a checklist.



Job Requirements:

ESF Review – Electrical Engineer preferable
Technical Inspection – Electrical Engineer or Mechanical Engineer with experience with high voltage, hybrid or electric vehicles, and an understanding of high voltage batteries preferable

Benefits to volunteers:

- *Recruiting opportunities* – connect with the best and brightest engineering students for internships and future workforce pipeline
- *Networking opportunities* – meet other industry professionals volunteering for the competition by networking in a different, casual atmosphere
- *Corporate Social Responsibility* – providing your employer with a story to showcase involvement in STEM
- *Giving back* – the opportunity to give back to the engineering community by mentoring the engineering students through the competition
- *Unforgettable experience* – observing students compete with their designed vehicle is memorable and rewarding

Are you ready to volunteer for Formula SAE Electric today?

Contact Kaley Zundel at (724) 772-8533 or Kaley.Zundel@sae.org by October 28th so we can announce expansion to the waitlist teams. Other opportunities may still be available after this date.

Limited housing accommodations available.

SAE can't expand this competition without you! The students are anxiously awaiting!



Dear Ms. Zundel,

October 10, 2015

The inaugural Formula Electric competition was held three years ago, as a modest addition to the existing Lincoln internal combustion competition. Since that date, consumer interest in the purely electric powertrain has skyrocketed: in the last three years, twice as many battery-powered electric vehicles have been sold in the United States as in the country's entire history up until that point.

Student interest in electric vehicles has correspondingly soared over that time period – electric vehicles are regarded as the future, and electrification as one of the most exciting current trends in the automotive industry. Unfortunately, the resource allocation for FSAE Electric has not kept pace with this trend.

This year saw the number of competition slots for FSAE Electric remain steady at last year's value of 20, despite the newness of the competition and the increasing public interest in the subject. Because of this, every available slot filled within twelve minutes of the registration period opening. Within the next hour, an additional fourteen waitlist slots had been claimed, leaving 41% of the total interested teams on the waitlist. It's likely that even more teams simply gave up and didn't bother to sign up, when faced with crashing registration servers and a waitlist almost as long as the total competition roster.

Evolution Racing is a design team at The University of Texas at Austin, where FSAE was founded in 1981. We formed in September 2014, and elected to spend two years organizing ourselves, building a team framework, and working through a baseline design, before competing at our first competition in summer 2016. We currently house 50 team members, and have achieved significant design progress over the last year. We were heartbroken when, clicking the Register button a mere 30 minutes after the period opened, we were greeted by a waitlist implying a near certainty that all our work this past year would be for naught.

We are concerned that, faced with the need to wait an additional year before competing, most of our original membership will fall away and pursue other projects. We are concerned that despite the incredible amount of time and effort we have already put into our design, this team may die without any of its members ever seeing their car race. But most of all, we are concerned also when we think of the fourteen other teams around the world who are currently experiencing exactly the same feelings that we are right now. We are concerned, imagining the lasting bad taste that will be left in the mouths of almost half the current crop of excited electrical automotive engineers in college, as they are prevented from competing alongside their sister schools.

We believe that a snubbing of this magnitude could lead to significant effects both throughout the future of the automotive industry, and within the public's perception of FSAE as the premier intercollegiate engineering design competition. How can a competition revere itself as a display of the best efforts of the world's leading collegiate talent while denying entry to a random half of its applicants? How can FSAE achieve its goals of providing a sound and practical educational experience to the engineering students of the world while turning away so many? At least three of the other teams currently on the waitlist have competed in FSAE Electric in years past. Who knows how many of the other teams, like us, have already put in hundreds or thousands of hours of design work? How does a team captain face an established family of students, and tell them that they aren't going to get to race this year? Even worse, the majority of the rest of the waitlisted names are new teams, eager to join in the competition for the first time; faced with a waitlist, most of those teams will die, and likely will not return in future years. FSAE faces the prospect of estranging an enormous number of excellent young minds.

Despite all this, our pain grew far worse when we looked at the team roster for the Lincoln internal combustion competition, the counterpart to our event. The internal combustion competition is held in the same location on the same dates as the electric competition, but while our roster was overfilled by 75%, the internal combustion competition still has, at the time of this writing, ten empty spots. How could we and all these other electric



teams be denied registration for signing on 30 minutes after opening, while an internal combustion team could decide to enroll a month from now and still make the list?

We implore you to reconsider Lincoln's team roster allocations. It is clear that currently the collegiate interest in electric racecars is being massively underestimated and underserved, and that the resources devoted to these competitions have been allocated out of proportion to the interests of the students participating. We ask that you consider allocating further resources to expand the electric competition roster for this and future years.

We ask also that regardless of whether any additional resources are spent, you make the remaining ten internal combustion competition slots available to electric teams from the waitlist. We feel that failing to do so would represent a profound injustice against the dozens of individuals on those first ten teams of the electric waitlist, by providing priority registration to teams who attempted to register orders of magnitude later than did they. Please note that this is not a self-serving request, as we are not one of those ten teams – we would not be granted registration under this change. We simply feel that it is right, and that the current situation is unjust.

We apologize for adding to the stress of what we know is a busy time for FSAE, but this issue lies very near to the hearts of a great many young engineers around the country and world. We know you will give it the consideration it deserves, and hope that something can be done to resolve this problem.

Best Wishes,

Conor McMahon

Corporate Liaison and Chassis Lead | Evolution Racing

The University of Texas at Austin | Mechanical Engineering

Class of 2016