

Greetings from Crimson Racing,



The spring semester is finally underway. With new classes giving us the opportunity to expand our knowledge and great weather keeping us in good spirits, huge progress is being made on our car. We here at Crimson Racing have a number of reasons to be excited about being back at the university.



We have completed our pit cart. The freshmen did a great job designing it and gained valuable experience while building it. The cart is needed for carrying our tools and gear during the competition. We would like to thank Cain Steel for their generous donation of materials that made this possible. The logos of all our sponsors are in the process of being ordered so they can be displayed on the cart during competition.

Our team has succeeded in getting our engine running on the water dyno. The next step includes tuning the engine in order to reach maximum torque and reliability. These are two factors that will contribute to our success in May. We have begun with the old intake and exhaust, as we plan to practice driving with the car we used in last year's competition. We also have been focusing efforts on the ECU, or Engine Control Unit, which sends out the signal to charge the coils for the spark plugs. As its signals alone are not able to handle the current required to charge the coils, we have designed a circuit board that amplifies the signal, allowing it to handle the required amount of current.

The frame of the car has been coming along well. The steering and little attachments of the frame have been completed. We are thrilled to have received our machined spherical bearing housings from Fitz-Thors Engineering, as their quick work allows us to begin building our a-arms, which will soon be completed and assembled on the car.



Lastly, our documentation to use electronic throttle control has been submitted. With the expectation that our documentation will soon be approved, we have begun to build stand alone circuits in order to perform necessary calculations and rule checking.

Again, we would like to thank you for supporting the Crimson Racing Team. We hope you are as excited as we are to witness the final pieces coming together in for the competition. Please contact us with any questions, comments, or advice; we would love to hear from you!

Sincerely,  
Crimson Racing  
[alabamafsae@gmail.com](mailto:alabamafsae@gmail.com)  
<http://fsae.eng.ua.edu/>