



UPCOMING



APRIL GENERAL
MEETING WITH
CUMMINS
APR 08, 7 PM-8 PM



UNVEILING
APR 24, 12 PM- 1PM

SPECIAL THANKS

Thank you to our platinum
level partner,
Cumberland Additive



CUMBERLAND
ADDITIVE

Thank you to our gold level
partners, Haas and RWE



Thank you to our silver level
partners, Texas
Instruments, Cummins, and
Solid Works

RECENT EVENTS

Longhorn Racing has had a fantastic start to the Spring Semester! With regained access to facilities and ongoing virtual meetings, our design teams have been able to work progressively through design and manufacturing cycles to prepare the vehicles for a virtual unveiling and upcoming competition.

In addition to the design teams' progress, we began the spring semester with a new officer board and great success in both facilities and outreach. With six people working nonstop over a February weekend, we were able to get the LHR garage completely cleaned and organized. For outreach, our members had a blast teaching and talking to young STEM enthusiasts at virtual UT Girl Day and ExploreUT events.

This semester has been off to an excellent start, and we are excited to finish it strong. Make sure to keep an eye on our social media outlets for more updates, events, and information!

LONGHORN RACING INVITES YOU TO LHR UNVEILING 2021



Join us to celebrate the hard work of our members as well as all our supporters in our annual unveiling event. Although we cannot hold an in-person celebration, we assure you that our virtual unveiling is something you won't want to miss! Make sure to tune in to our [YouTube](#) live-stream on April 24th at noon!

CONNECT WITH US

Website:

www.longhornracing.org

Social Media:

Facebook: [@UT.LonghornRacing](#)

Instagram: [@LonghornRacing](#)

Twitter: [@LonghornRacing](#)

Make a contribution:

<http://tinyurl.com/donateLHR>



MONTHLY UPDATES

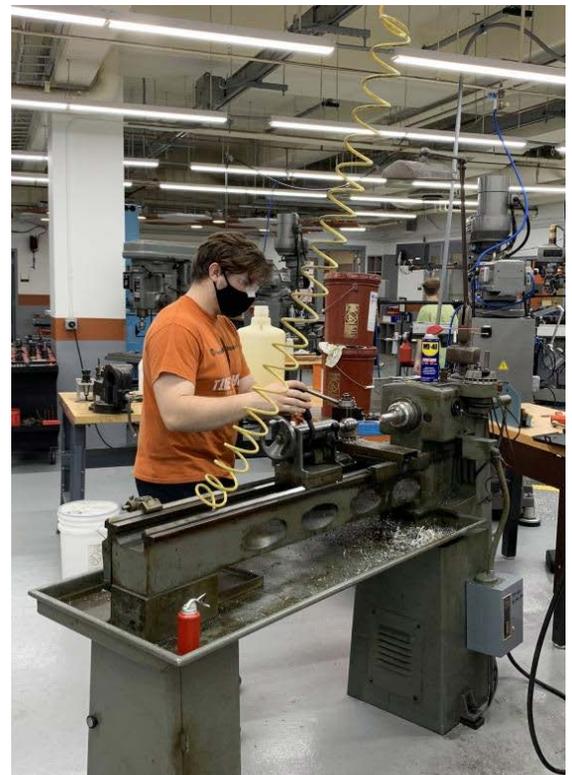
Members of the combustion team have worked exceptionally hard this academic year, and we are looking forward to finally getting the car up and running after all of the hardships the past year has brought us.

As this academic year comes to a close, we are putting in work to finish up our 2021 formula car. We are pushing hard to complete our vehicle in time for competition season in late June. Though team leaders were initially worried that COVID might prevent us from finishing and testing the 2021 car, progress has ramped back up in the past few months as Cockrell school's facilities gradually reopened with proper health and safety restrictions in place.

The IC team members on campus have been in the machine shop and in the garage for the past few months, machining parts and assembling the car. As the last of our car's off-the-shelf components trickle in through the mail, we fully expect to meet our wheels-down deadline of Saturday, April 24th. The first day of testing for the combustion car is planned for May 1st, with several other testing sessions planned later in the month.

Thank you to all of the combustion team members and those who have kept up with the team throughout this challenging year. We welcome everybody to tune in via live-stream to see the culmination of months of hard work as the combustion car is revealed at LHR's 2021 Unveiling Ceremony!

Left: Members working on the frame jig
Below: Member working on stub shaft manufacturing





MONTHLY UPDATES

The Longhorn Racing Electric team has been hard at work preparing the 2021 vehicle for the FSAE competition this summer. After regaining access to our facilities at the start of the semester, we immediately resumed our manufacturing work and set a target vehicle powered run date of March 31st. Unfortunately, we were forced to push our powered run date back to April 18th due to order delays on some of the vehicle components. Despite the delays, we fully expect to have a completed vehicle by the end of April which should allow us to spend the time before the competition doing vehicle testing and driver training.



In addition to preparing for many of the virtual events that are a part of the FSAE competition this summer, our team has spent a lot of time preparing for the vehicle unveiling in April. The team leads will be presenting about the design and performance of our 2021 vehicle and we expect that everyone will be impressed by the results. Our vehicle livery is fully designed and we can't wait for everyone to see the 2021 vehicle!

Our students have been incredibly resilient this year despite the numerous hurdles and setbacks we had to overcome. The glue that holds our team together is the drive and passion that our members have to see our vehicle perform well at the FSAE competition. It takes countless hours of voluntary effort for a team like ours to succeed and we couldn't be more proud of every single student on Longhorn Racing Electric.



Top: Vehicle's newly fitted rear rotors

Middle: Pedal Assembly

Bottom: Members wet sanding the nosecone and undertray



MONTHLY UPDATES

LHR Solar is coming off a successful design period last semester and has now fully moved on to manufacturing the vehicle.



Right: CNC cutting our foam
Below: Steering wheel machined by
Dynamics lead, John Ching

Our Mechanical systems have lined up vendors for Aluminum tubing supply, metal stock, and welding. They are also continuing preparation for the Carbon Fiber Layups that will create the outer shell of the car. Our Dynamics team has started machining steering components and is looking ahead to the uprights.

Our Electrical Systems are continuing development in addition to beginning manufacturing of core PCBs. Although we've been able to use the Texas InventionWorks area occasionally for soldering components onto the circuit boards, most of the work has been limited to members' apartments. In addition to this work, we've been offering soldering training to members. Our Array team is pushing its MPPT algorithms farther along with recent developments in their array simulator. The Array team is also working on thermal modeling of the solar cells in order to better design heat dissipation methods. Our Controls team is writing application code for the various driver functions while also maintaining their simulator. Our BPS team is troubleshooting their current BPS code as well as documenting the telemetry repository.

Overall, our team is steadily progressing through the manufacturing stage while keeping our fingers crossed for more in-person work access later this semester. With Unveiling in less than 1 month, we are full steam ahead in livery design and vehicle renders. We can't wait to show off our designs!

