

*"knowledge isn't power,
applied knowledge is power"*



**SPRING 2023-2024
VOLUME 3, ISSUE 3**

**A QUARTERLY NEWSLETTER CELEBRATING TUSTIN HIGH SCHOOL'S
TECHNOLOGY & ENGINEERING PROGRAM**

EV Challenge 2024

Every Spring, the times comes to - race! All of our cars were destroyed in the shop fire earlier in the year, but now they are literally rising from the ashes! Our students did an amazing job of completely rebuilding all three of our electric vehicles, making them better than ever and just in the nick of time for our EV competition at Saddleback College two weeks ago. The team managed to get all three cars to the competition, but in the end there was not enough time for road-testing. Against all odds, our Phoenix 55 car finished in 4th place!



T-Tech EV Challenge Team

SENIOR PROJECTS UPDATE

Just like the cars, all of our senior projects were destroyed in the shop fire, so expectations for this year's T-Tech Showcase were understandably low. However, our seniors have been hard at work rebuilding some amazing projects that include electric guitars, drift trike, claw machine, pinball machine, electro-mechanic chess and of course our competition electric vehicles. We're looking forward to displaying all of these & more on **May 21st** at our T-Tech Showcase. Join us!



CO2 Rocket Cars

T-Tech has added a modern spin to traditional CO2 drag racers. Historically, these little cars have been hand-carved out of balsa wood. Our cars still use the traditional CO2 cartridge for propulsion, but are all computer designed using SolidWorks CAD software and 3D-printed in plastic. These little machines can travel at a real-life 40 miles per hour! If you've never seen these in action, join us for a demonstration during the T-Tech Showcase on May 21st.



3D-Printed CO2 Rocket Cars

ALUMNI SPOTLIGHT

This quarter, we highlight Angelica Pelcastre, T-Tech class of 2019. While at Tustin High, Angelica was a Boeing Intern, LMIT Inventeam member and a driver for our EV racing team. After graduating from Yale University in electrical engineering, she is now a Sustaining Quality Engineering Manager at Amazon Lab126, "the innovation hub" of Amazon devices. Her team is responsible for managing Amazon devices like Echo speakers, Kindles, Fire TVs, and even Alexa eyewear! She credits her T-Tech senior project class as a great first look at the development process. Her advice: Explore everything you can and keep those soft skills strong!



Angelica Pelcastre, Amazon Quality Engineer

Upcoming

Join us for the annual T-Tech Showcase!
Tuesday, May 21 6:00 -7:30 in the Science Building plaza

Contact Mr. Hernandez with any questions at ehernandez@tustin.k12.ca.us