

RoboWarriors

FIRST® Team 41, WHRHS

FIRST® Mid-Atlantic



End of Season Sponsor Update

2021-2022

Written by Team 41: RoboWarriors
Watchung Hills Regional High School
www.wheatrobotics.org

Preseason

Each year is a fresh start with brand-new students excited to learn all about what robotics has to offer. Preseason begins on the first day of school, with the first robotics meeting being held on the Thursday of that week. New students are taught about the FIRST Robotics Competition and acquire skills they need for build season through a mock kickoff. By introducing new members to the process of analyzing game videos and manuals, we can better prepare them for the day of the actual game release. Our main focus during preseason was to teach all incoming members and help them choose one of Team 41's five disciplines: mechanical, electrical, programming, design, and business. Each of these sections of robotics are led by experienced members who have spent multiple years as dedicated members of Team 41.



Safety is our number one priority here at Team 41. As COVID-19 continues to impact our daily lives, our preseason came with additional safety rules. Masks are required to be worn at all times, and social distancing must be maintained during dinner. With these rules, we aim to provide a safe learning environment for students to learn and create.

Build Season

Build season began the day of the game's release, January 8th. The name of this year's game is Rapid React, where robots will compete to score as many points by shooting oversized tennis balls into a hub and completing a monkey bar climb. We jump right into our preparation with an entire Saturday of brainstorming known as kickoff. Every member is involved in our brainstorming process, which gives cultivates unbounded ideas full of creativity. For more information about the game, check out the official game trailer linked below.



PRESENTED BY  BOEING

Rapid React Trailer:

<https://www.youtube.com/watch?v=LgnjEjl9cCM>

More about the game:

<https://www.firstinspires.org/robotics/frc/game-and-season>

2022 Competitions

FMA District Bridgewater Competition

March 4th and March 5th, 2022

Bridgewater-Raritan High School - 600 Garretson Rd, Bridgewater Township, NJ 08807

At the Bridgewater event, Team 41 ranked #2 after the qualification matches and was the captain of alliance #2. They played with Team 25, 4285, and 6897 making it all the way to the finals and becoming event finalists. The team also won the Excellence in Engineering award for their hard work designing and machining the robot.



FMA District Montgomery Competition

April 2nd and April 3rd, 2022

Montgomery High School - 1016 Co Rd 601, Skillman, NJ 08558



At the Montgomery event Team 41 ranked #7 after the qualification matches and was the first pick of alliance #3 captained by Team 11-MORT. They played with 11, and 303 making it all the way

to the finals and becoming event finalists. The team also won the Innovation in Control award for their excellent work at integrating sensors and programming the robot. This second successful event qualified the team for the district championship at Lehigh.

FMA District Championship - Lehigh University

April 7th to April 9th, 2022

Stabler Arena - Lehigh University -124 Goodman Drive, Bethlehem, PA 18015

Team 41 ran into some trouble on the first day, but persevered and were able to place #20 after qualifications. They quickly got picked by Team 365 - Miracle Workerz for the playoffs and Alliance 5 then picked Team 11 - Mort as their alliance partner once again. Alliance 5 was defeated in the semi-finals, but Team 41 won the General Motors Industrial Design Award for their exemplary job at integrating design, aesthetic, and function into a well-built robot. The team's success at Lehigh and their two district events ranked them fourteen in the district and qualified them for the FRC World Championship in Houston, Texas.



FRC World Championship - Houston, Texas

April 20th to April 23rd, 2022

George R. Brown Convention Center - 1001 Avenida De Las Americas, Houston, TX 77010



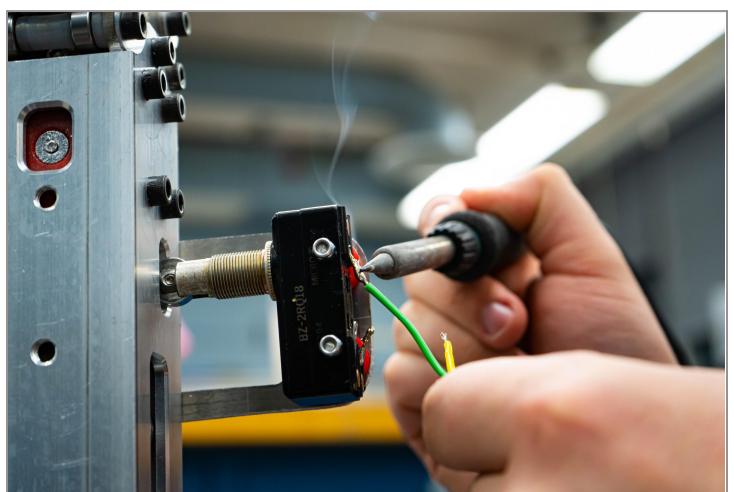
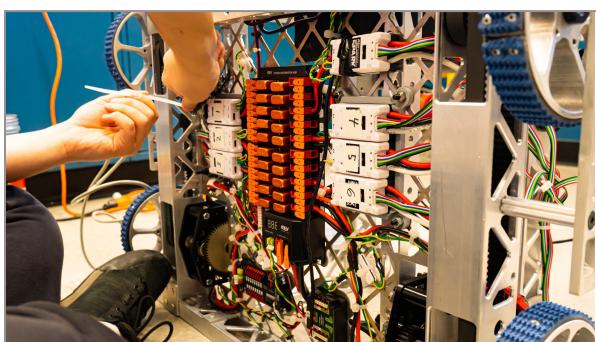
Thanks to the support of the community and sponsors, the team was able to compete at the World Championship. The RoboWarriors were randomly placed in the Roebling Division with 75 other teams from around the globe. After ten qualification matches, Team 41 was ranked #11 and was picked by Alliance 5 as their final alliance partner. They

played with Team 2531 - RoboHawks , 7407 - Wired Boars, and 4362 - CSPA Gems. In the first quarterfinals match, the alliance captain made a strategic decision and switched in 41 to play instead of 2531 as Team 41 has excellent shooting capabilities. 41 was also swapped in for another quarter-final match, where they upset the 4th seeded alliance and advanced to the semifinals. Alliance 5 lost to Alliance 1 in the semifinals, which rounded out the 2022 season for the RoboWarriors.

2022 Season Summary

The 2022 Rapid React season was the most successful season the RoboWarriors have had in their 25-year history as an FRC team. We won awards for their excellent design, construction and programming as well as ranking in the top 3% of all teams with their success at the World Championship. Thanks to generous sponsor donations, the team was able to build a top-tier robot and gain new experiences that will follow the students through their lives. First Robotics is a competition about building robots, but the experiences and skills the team gains from each season are even more important. Sponsors enable the team to not just gain STEM skills, but also communication, business and life skills. Hard work and perseverance in the face of defeat was a lesson learned by the team this year, that can be directly attributed to our success. Once again, generous donations from sponsors and the community allow us to have these experiences and develop long-lasting relationships.

Gallery



Team 41 - Sponsor Update: Page 6