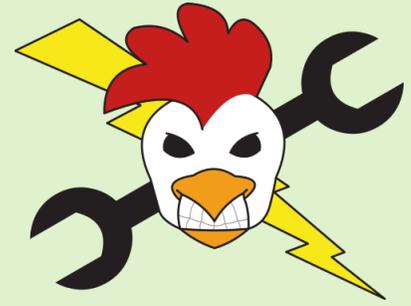


Sponsor Update!

02/28/2022

The Thunder Press



www.ThunderChickens.org



A Fresh Start!

Many exciting things have happened since the start of the season. With the announcement of this season's game at the annual Kick-off event on January 8th, students have been hard at work prototyping, designing, and finalizing the design of the robot. This season, the game's main tasks are to deliver cargo into the central hub and scale across four bars at the end of the match, each at a higher height and difficulty than the previous.

Students brainstormed ideas and tested their prototypes over a span of four weeks to ensure the most efficient and valuable techniques were used for our final design. Students were split into groups of five to focus on the main components of the robot.



PRESENTED BY  BOEING

This year has proven to be no different than any other with challenges appearing left and right. To navigate through this difficult journey, we have the assistance of our mentors and student leaders, one specified for each department.

Starting with our Design team, led by our Vice President, Ankit Mudunuri, students are taught how to use SolidWorks 3D CAD design software to design the parts of the robot. With this software, design has the ability to create draw-

ings and schematics to visualize the advantages and disadvantages of the prototypes made by the Mechanical department.

The Mechanical department, led by Ava Harvey, have been maneuvering with the difficult task of building the chassis, shooter, and climber portion of the robot. The build process is moving smoothly in regards to the shooter mechanism. However, there have been challenges with the climber, as it has been proven to be unstable when the motors are active. Modifications are being made to resolve this issue.

In the Mechanical department, students can gain hands-on experience using tools such as bandsaws

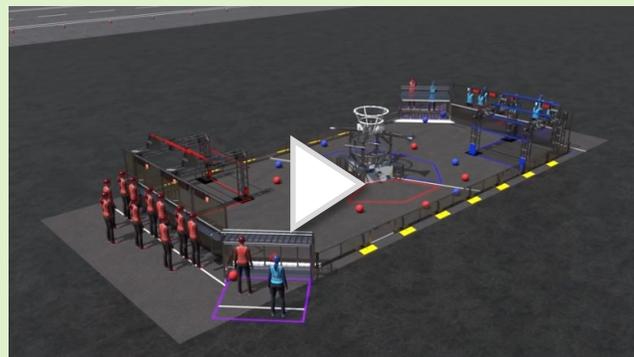
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and rivet guns. As each student enters the build area, safety is always first, with the help of our safety captains, Dani Mazurek and Drake Thomas. They give us friendly reminders to wear our safety glasses and keep our sleeves rolled up near power tools.

Every challenge is a learning opportunity. Led by Gabe Wiechert, the Electrical department has taken the time to give an introductory class to new and returning students about the various components used by the Electrical department such as Anderson connectors and CAN cables. They also have made a motor tester, which has been used to be test the numerous prototypes made by Mechanical.

Members of the Programming



Click the photo above to view this years game animation.

department, led by our student CEO Noah Vermeulen, have the opportunity to learn about the Java programming language by using the online coding course Code-

academy. Students can also look at the code used during prior years to gain an understanding of what they will develop by the end of the build season.

The Business department, led by Janna Salera, has been busy giving sponsorship presentations to our amazing benefactors. They have also raised a few hundred dollars for the team with the bottle drive which ended this week.

Sydney Bely, head of the Parts department, manages the countless parts we receive and keeps our team organized. With our six departments working simultaneously, we are thankful to our mentors and team leaders for keeping us on track!

Meet the student executive board:



Noah Vermeulen, Senior

Noah is a fourth year member of the team and the current student CEO. As CEO, Noah keeps the team on track by creating schedules, leading team meetings, and making sure the departments are working together and efficiently. Noah is the head of the Programming department. He makes sure that the other members of the programming team are working hard to create the logic of the robot. Recently, Noah has finished the code to use a PS4 controller to drive the robot. The drive team will use it to practice driving the robot for the competition.

Brendan Schwartz, Junior

Brendan is a third year member, team Vice President, and the head of the Mechanical department. He brings his experience and dedication to the team everyday. This year he has exhibited leadership and has helped new members adjust to the team. He has helped with a little bit of everything around the Mechanical department, including motors, the shooter, and the intake. All of these qualities has led to him being nominated for the Dean's List Award for the second time.



Ankit Mudunuri, Senior

Ankit is a fourth year member, team Vice President, and the head of Design. Everyday he can be seen working hard on the design of the robot. He has worked extensively on the drive base, not only in design but also in mechanical. His expertise is in drive bases, including swerve drives, butterfly drives, and tractor drives.



Janna Salera, Junior

Janna is a second year member, the director of the Business department, and is the student ambassador. Janna shows her passion for her team through the organization of the "Bottles for Bolts" fundraiser and supervision of the team's business and operations. She frequently participates in sponsorship presentations, oversees the updating of the official ThunderChickens website, and frequently contacts sponsors. Janna also constantly helps out in the Electrical department and is considered a "pillar" of the department. Due to her dedication, the team has nominated her for the Dean's List Award.



Our Competition Schedule:

Event	Dates	Location
Saline District Event	March 26 & 27	Saline High School
Macomb District Event	April 1 & 2	Macomb Community College Sports and Expo Center
Michigan State Championships	April 14 – 16 (assuming we qualify)	Saginaw Valley State University Ryder Center
FIRST World Championships	April 20 – 23 (assuming we qualify)	George R. Brown Convention Center Houston, Texas

The public is invited to attend competitions in person. If you'd like to join us, please contact frc.team.217@gmail.com and we will arrange for a tour!