

The Robette Roundup

February 2020

Weeks 5 & 6 of Build Season



Our mission is to inspire girls of all ages to incorporate STEM into their lives and to revolutionize the perception of women in STEM.

Upcoming Events

Open House

Come tour our work space to see our newly built robot on Sat. Feb. 22 from 10:00 am - 2:00 pm.

Lake Superior Regional

March 5-7, watch us compete for the first time this season in Duluth! Live stream will be available on Twitch.

North Star Regional

March 26-28, join us in-person as we compete at 3M Arena at Mariucci in Minneapolis.

What do our Core Values mean to The Robettes?

Confidence is...

- Having faith in one's own abilities, and standing up for them.
- Not worrying about what others think when we put ourselves out on a limb, trying new things.

Integrity is...

- Facing challenges with maturity and having respect for ourselves.
- Being honest and hardworking in all that we do.

Compassion is...

- When we try to help others when they are struggling.
- Treating others with kindness & empathy.

Perseverance is...

- The ability to bounce back, being able to brush ourselves off and keep moving forward, learning from our mistakes in order to help us do better in the future.
- Never giving up; striving in times of hardships.

Curiosity is...

- An eagerness for learning and growing.
- Trying new things to find a new solution, idea, etc.



Team Website: www.therobettes.com

Team Email: 2177@therobettes.com

Team Twitter: [@therobettes](https://twitter.com/therobettes)



Mechanical Update

Mechanical moved towards the completion of build season by finishing our practice robot. We built uprights and supports for our shooter, intake, and conveyor. We handed off the practice robot to Programming so they can test their code. We are finalizing attaching the supports for the elevator, the last “what” goal of our strategy analysis from Kick-Off.

We are shifting gears to focus on our competition robot which is about halfway completed. The competition robot shooter got an image boost, engraving a bow on the side of the thick lexan. We assembled the robot camera and mounted it which will be helpful for drive team at competitions.

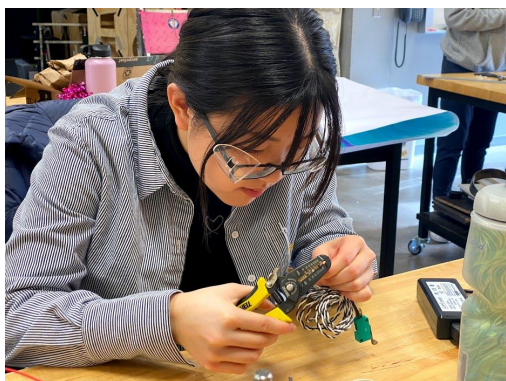
We are finishing the bumpers for the robot, which have our team number on them for matches. Our bumpers are reversible red and blue, allowing us to denote which alliance we are on for the match.

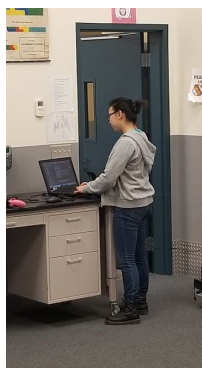
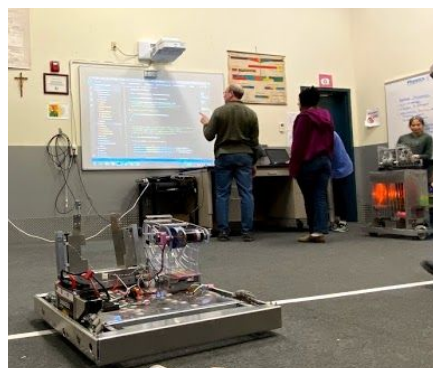
Electrical Update

Electrical is powering towards accomplishing our goals for the 2020 build season. We delved into our work on the battery box for the robot, then re-evaluated and improved our design. We decided to rotate the battery box 90 degrees to make our use of space more efficient.

Additionally, we routed the CAN wires, which are a key part in sending information on what the motors should do. We color coded all the wires according to mechanism to help us with diagnostic work - differentiating wires that mostly look the same.

Finally, we mounted the electrical boards onto the practice robot and competition robot.





Programming Update

Programming's main efforts have been modifying vision tracking for driving the robot. The field elements have reflective tape on them that guides our aim when shooting the power cells.

We have also been working with the practice robot to test the code. We are working with all of the robot components, including driving, shooting, the conveyor, the intake, and the main functions. We were excited to learn that our code works, and we can drive the robot! :) We are working with shooting speed and distance from the shooter, and being able to move and regulate of the robot components.

Business Update

Recently, Business planned our Open House (Feb. 22), including laminating signs & guides for the event.

This year we expanded our teamwear collection to flannel pants, blankets, and children's size shirts! At competition, we hand out hundreds of our trademark bows - the team's current total is >2,600!

This build season, one of our main goals was to increase fundraising. Our efforts to achieve this goal included researching and informing new businesses about our team through emails.

We are so thankful that parents feed us during our long Saturday meetings, and we display our gratitude through thank you notes.

We recently completed a week-long social media challenge in which we showcased how our team is a family, not just robots. Check out The Robettes on Instagram to see how we are a family!



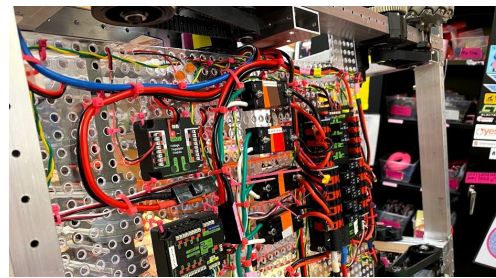
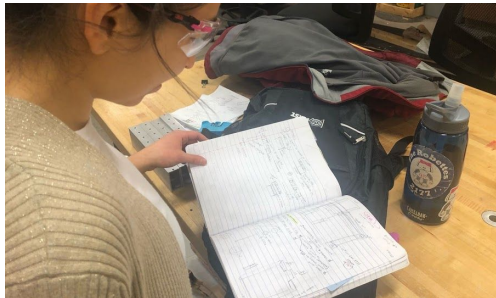
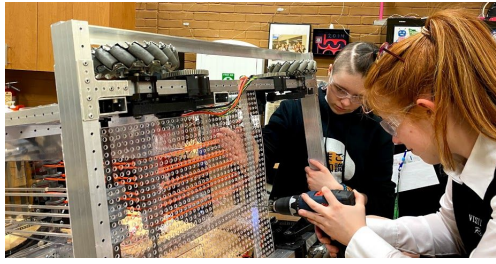
Open House

February 22nd is our annual open house from 10am to 2pm!

Come visit our build space to learn about this build season. We'll have activities for all ages!

Activities include:

- Talking with the team members about the new build season
- Driving our robot
- A self-guided tour
- Watching the 2020 game animation
- Coloring sheets
- Bow making
- Enjoying wonderful snacks



Student Spotlight: Mairin '23

Mairin is a freshman programmer. She was a member of Blazerbots, Visitation Middle School's *FIRST* Lego League team; after being convinced to join by a friend, she discovered an enjoyment for working in STEM. She was mentored by former captain Sarah C '19!

She quickly joined The Robettes after her positive middle school experience. Mairin has been happily welcomed by the team, and she displays a positive growth mindset, passion, and dedication. Her worries about a lack of knowledge were quickly diminished by the programming subteam's guidance. Maggie, the programming lead, appreciates Mairin's perseverance, attentiveness, and willingness to fail. Her friendly personality makes her a great fit on the team. Simply put, Mairin is amazing!

A Special Thanks to our Sponsors:



Visitation School

Palmer
Family



ptc

3M

Boston
Scientific

Cooper Family

Libbesmeier
Family



Clark Family

BOSE

trimin

Barb Franke



Team Website: www.therobettes.com

Team Email: 2177@therobettes.com

Team Twitter: [@therobettes](https://twitter.com/therobettes)