

LIGERBOTS

FIRST® Robotics Team 2877

Newton North and South High Schools



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About the LigerBots

The LigerBots is FIRST Robotics Competition (FRC) team 2877. FIRST ("For Inspiration and Recognition of Science and Technology") is an international organizer of competitive robotics events whose mission is to lead students toward careers in science, technology, engineering and mathematics (STEM). The LigerBots is a non-profit organization that provides students with the skills they need to prepare for the jobs of the future and become the next generation of engineers and business people. The team combines students from Newton North and Newton South high schools to spread the message of STEM education in the community and help students develop their problem solving and critical thinking skills while they pursue their interests in business and robotics.

LigerBots do intensive technical and outreach training each fall, and have six weeks each winter to build a 120-lb. robot that can compete in the spring in a new game designed by FIRST each year. The LigerBots pride ourselves on our dedicated student leadership infrastructure and variety of mentors, who include scientists, engineers, programmers, marketers, publicists, financial consultants, project managers, and graphic designers. The team's ability to offer these opportunities to high school students is dependent on its generous sponsors. The LigerBots is always looking for new sponsors and donors to help sustain the team. Major sponsors are identified on all LigerBots materials, including marketing documents, the competition pit, the website, and the robot itself.

Sponsor or donate to the LigerBots: info@ligerbots.org, www.ligerbots.org



The LigerBots at the 2020 Northern Connecticut District Event.

Puma and Panther level sponsors

Puma and Panther level sponsors





Be a LigerBot, Mentor a LigerBot

Who is on Our Team

- We are composed of students from Newton North and Newton South high schools
- We have adult mentors and coaches, including parents of team members and other STEM and business professionals. We are always looking for adult mentors who have expertise in mechanical and electrical engineering, programming, marketing, publicity, finance, project management, and graphics

Our Role in FIRST Robotics

- We design and build a robot with a different function every year, and participate in two to four FIRST competitions
- We have made it four times to the FIRST World Championship, including in 2018
- We organize the Newton FLL Qualifier and the Eastern MA FLL State Championship for elementary and middle school students, and we mentor FLL teams



LigerBot and mentor work on mock playing field elements.

FIRST Opportunities for Younger Students

- FIRST Lego League (FLL) is robotics for students in grades 4 – 8. Email: fll@ligerbots.org
- FIRST Lego League Jr. is for students in grades 1 – 3. Website: www.juniorfirstlegoleague.org

Be a LigerBot, mentor a LigerBot: info@ligerbots.org, www.ligerbots.org



The 2020 pit crew with Perses, the LigerBots 2020 robot.

The Engineering and Business Skills We Learn

- | | | |
|----------------------------|--------------------|-------------------|
| ■ Mechanical engineering | ■ Entrepreneurship | ■ Event planning |
| ■ Electrical engineering | ■ Finance | ■ Public speaking |
| ■ Programming | ■ Time management | ■ Graphic design |
| ■ Computer Aided Design | ■ Leadership | ■ Writing |
| ■ Gracious Professionalism | ■ Teamwork | ■ Mentorship |

The Rhythm of Our Year

- **Fall and late spring:** Pre- and post-season. We plan projects, do team-building, technical training, fundraising, and STEAM outreach. Team meetings at Newton North High School on Mondays 6:30 p.m., and at Newton South High School on Thursdays at 6:30 p.m.
- **Winter:** “Build” season. We design and build a robot from Jan. – Feb. Meetings Mon. – Sat. at Newton South High School
- **Spring:** Competition season. We compete against other FIRST Robotics teams with our robot, weekends in March and April.