

Linn-Mar Robotics

Linn-Mar Robotics is an organization of 3 FIRST™ teams within Linn-Mar High School. FIRST™, “For Inspiration and Recognition of Science and Technology”, was started in 1989 by Dean Kamen and Dr. Woodie Flowers to inspire young people to become science and technology leaders. For more information on FIRST, you can visit usfirst.org.

- FIRST™ organizes several levels of competition:
- FIRST™ Robotics Competition (FRC) ages 14-18
 - FIRST™ Tech Challenge (FTC) ages 12-18
 - FIRST™ LEGO League (FLL) ages 9-14
 - Jr FIRST™ LEGO League (Jr.FLL) ages 6-9

FRC parallels the experience of a start-up company in that they have only 6 weeks from when the challenge is announced to have designed and built a robot solution.

FTC embodies a business model that allows iterations of the product (robot) as the competitors robots improve.

Both FRC and FTC compete in an alliance model, where your partner in one match could be your competitor in the next match. This requires that students interact with “Gracious Professionalism” so that they bring out the best in themselves and their competitors. Linn-Mar FRC Team 967 - Iron Lions, FTC team 4324 Lost In Time, and FTC team 4150 - Dark Matter have been competing the last few months in multiple states around the midwest. Dark Matter and the Iron Lions will be competing at the World Championship April 22-25 in St. Louis. Of the 400,000 students around the globe in FIRST, these teams will be among the 18,000 students at the event that some call the “Super Bowl of Smarts”. <http://championship.usfirst.org/spectator-schedule>

The mission statement of Linn-Mar Robotics is “Empowering students to become technology leaders through experiential learning and mentorship.” This means that students learn technical and soft skill,

which they will practice the rest of their life. These skills are naturally acquired throughout the robot creation process, with guidance from industry mentors.

One major goal of Linn-Mar Robotics is to connect with the local community, to both raise awareness of FIRST programs as well as STEM. By partnering with area businesses, the costs of the club and outreach events are offset and the benefits amplified. These partnerships with business benefit all involved by being “some of the hardest fun you’ll ever have”. Linn-Mar Robotics provides bi-monthly newsletters, as well as a pool of highly qualified interns.

Linn-Mar Robotics has several week-long summer camps designed to teach “kids of all ages” how to design, build, and program a robot. These camps are 5 days long and run throughout the summer and can be helpful to everyone from elementary school to adults. There are two age groups for summer camps: incoming 4th-6th graders and 6th-9th graders. The 4th-6th graders get an intro experience to FLL, and learn how to build and program their own LEGO robot to overcome different challenges. At the end of the week, a miniature FLL competition is run, and the parents are invited in to cheer on their students. New this year, the camp will provide a “train the trainer” experience, where adults learn about the robot as well, and gain experience of teaching the camp yet that day. Linn-Mar Robotics members are present the entire time, providing support for both adults and students. This is great for adults who want to start or support an FLL team, or their own camp in the summer.

The second camp is for incoming sixth through ninth graders. Small teams of students design, build and program (in Robot C) an actual robot from a VEX kit. Throughout the week, they iterate their designs to best compete against other teams in a game developed by Linn-Mar Robotics. This more advanced class has the students own more of the experience while mentors are on-site to help students overcome any difficulties. Both of these camps are available for any student in the incoming grade to attend.



Lost in Time team picture from State Championship



Dark Matter competing at the North Super Regional



Austin helping a student at the FLL summer camp



Dark Matter team picture from North Super Regional



Iron Lions team picture at North Star Regional



Iron Lions, with their robot to the right, competing at the North Star Regional

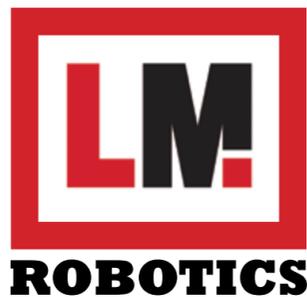
When you mix ability with inspiration, great things happen. This is certainly what’s going on in Marion with the Linn-Mar Robotics teams. It is our honor at Marion Process Solutions to support such a great program that fuels entrepreneurial spirits along with hearts dedicated to their team – key traits that have propelled the Linn-Mar Robotics participants to excel on a global stage. And what a joy it is for them to see firsthand how innovation can change the world, while building relationships that can last a lifetime.

We salute the Linn-Mar Robotics teams and their leaders for their commitment to excellence. We’re excited to see an upcoming generation of leaders that find unique solutions in every new challenge, look at opportunities from every angle, and turn inspiration into ingenuity. This is how we think about innovation at Marion Process Solutions, and it certainly fits the Linn-Mar Robotics teams to a T.

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Please contact us at <http://lmrobotics.com/contact-us/> and we’ll help you have “some of the hardest fun you’ll ever have”.