

check these skills

Robotics students compete in the annual District Skills USA Competition.

After 10 weeks of preparation, the Robotics Magnet took first and second place in Mobile Robotics in the District SkillsUSA competition in February.

The three teams who took the top two places in each competition advanced to the State Level of SkillsUSA. In Mobile Robotics, sophomores Connor Bremer and Jack Ramirez took second place.

"This is my first time doing VEX and robotics, and I feel really happy about it," Ramirez said. "I know this is just the beginning, and that it's going to get harder. My partner, Connor, and I will do our best to continue on."

SkillsUSA is divided into three portions – competition, presentation and an engineering notebook. However, the scoring system is set up so that the presentation and notebook outweigh the competition portion to force the students to focus on job skills as well as engineering.

"The hardest part is to actually do your notebook, because you have to do it every day, and they'll know it because it won't be as detailed, and the judges are looking for it to be as detailed as possible," Johnson said. "They want as much information as possible about the design process as you were building the robot."

The first place Mobile Robotics winners, Johnson and sophomore Adam Metzinger, felt they did well in the number of points they scored but plan on improving their autonomous score by adding a visual line tracker.

"The robot will follow it, and even if the robot hits a ball or something, it will still go straight," Metzinger said.

While Robotics Magnet teacher Max Morales was proud of how well his students did, he believes that there will be a lot of improvements needed before the state SkillsUSA competition.

"They did score points, but the opportunity was there for them to score a whole lot more during autonomous," Morales said.

Ramirez felt that the presentation and notebook were two of his team's strong suits, which he hopes to continue at the state level.

"I want to win, and have some fun and hopefully find a good scholarship to good colleges," Ramirez said. "We did our best – our goal was to surprise the judges, and I think we achieved that."



WORKING ON his Urban Search & Rescue Skills USA Vex robot, sophomore Tyler Wilkinson prepares for competition. "We had a robot that was essentially designed to pick up fake bombs and safely remove them from a simulated neighborhood – our robot had robot arm and claw," Wilkinson said. "While at the competition we made some improvements to our robot, they weren't enough, but we still got third place which is pretty good." [chase karacostas]



"In our current robotics class we're given a certain set of things we have to do and every single thing we have to do, we're certified for essentially. So, this isn't just some random certification, it's a business recognized certification."

–Trenton Ornelas, 11
[zemariah vaughn]

just the **basics...**

SUBJECT: Robotics

TEACHER(S): Max Morales

STUDENT NO.: 80+

workload 2hours

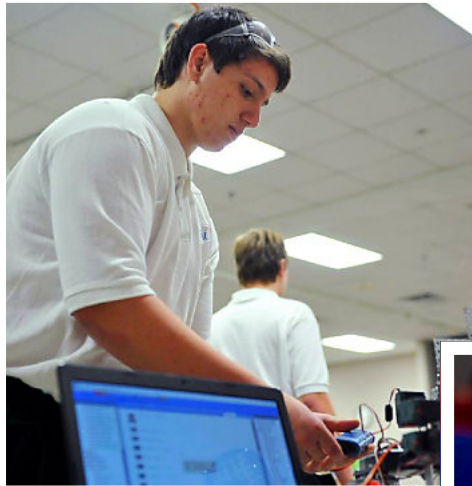
study time none

applicability Machinist

Mechanical Engineer

Aerospace Engineer

LEANING OVER to work on his Mobile Robotics SkillsUSA robot, sophomore Adam Metzinger adjusts the compression and speed of the launcher. During the match, the launcher kept over and under-shooting, so Metzinger and his partner, Hunter Johnson, were unable to score into the net. "It affected us by not being able to score as much," Metzinger said. "We could've gotten another 10-20 points out of it, but we couldn't do that because we were not prepared." [chase karacostas]



SENIOR CONNOR Kraeplin works on a welding project for his robotics class. Sophomore through senior year, many robotics students perform welding projects from creating a steam engine, to large welded eagles out of scrap metal. "I was welding a piece I cut out," Kraeplin said. "It was mostly an example because I'd finished most of my welding projects, but that one was a hand that I was working on, and I was just finishing up on the fingers," [chase karacostas]



Austin Ferrell, 9/Adam Leslie, 9
 [chase karacostas]



Cale Colburn, 11



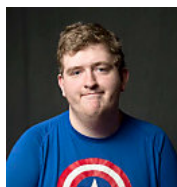
REACHING INTO the Mobile Robotics SkillsUSA competition field, sophomore Hunter Johnson adjusts the placement of his robot before starting the match. Johnson and his partner, Adam Metzinger, ultimately took first place in this district level Mobile Robotics SkillsUSA competition. "I was readjusting the robot for autonomous, and that was our second run," Johnson said. "We scored really well on our first run, so we went into the second one pretty confident. Last year we got second, so we were pretty excited to get first this year and we're excited to go to state." [chase karacostas]



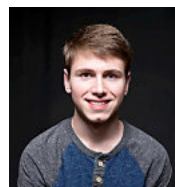
"I feel like it's affected me, it's made me more capable of fixing things with my hands, more capable of fixing problems that I wouldn't be able to do normally. It's also given me a lot of friends that I've had a lot of fun with over the years."
 -Oscar Ribeiro, 12



"I'm probably going to try to get a job in a work shop environment, dealing with machinery and manufacturing, and then go to college to pursue engineering. I started in junior high with robotics, then I moved up to high school, and it has always been something that fit me."
 -Ahmed Mohamed, 12



"It has impacted me through all the things I've learned, all of the different programs, all of the different styles of lines, and all of the different techniques. I now have the knowledge to create things that I've really wanted to create."
 -Michael Hoofard, 12



"I enjoy robotics because we learn skills from past ages and skills from future ages."
 -Kyle Owens, 11

What has
 ROBOTICS
 taught me?