EMS PTSA ROBOTICS CLUB 2022–2023 ACCOMPLISHMENTS

- Registration Numbers: 130 students; 30 teams
- Tournaments Participated: 15
- Tournament Awards: 43
- State Qualifying Teams: 10
- World Qualifying Teams 7 (47C, 47D, 47J, 47R, 47T, 47W & 47X)
- Awards at World Championship: 2



EMS PTSA ROBOTICS

• Goal:

➤ As a team – design, build, & program a robot to attend two EMS and other local tournaments, and potentially qualify for State or even Worlds

- Team Requirements
 - Team size 3-5 students
 - Must have a parent coach (manager and possibly technical advisor)
 - 2+ hours of teamwork per week (per each team's discretion)
- 8 club teaching meetings on Wednesdays 2:20-3:20pm (Sept. Nov.)
- Club meeting work time & scrimmages on Wednesdays 2:20-3:20pm (Dec. Feb.)
- After-season game (optional)
- Q&A at weekly meetings & by emails with coaches



<u>Full Volume</u> – this year's game

Visit <u>PTSA Robotics Club</u> Webpage for information about this year's game, rubrics, etc.

COMPETITION RESOURCES

- Competitions are organized by <u>REC Foundation</u>
 - WA VEX IQ events list (on robotevents.com)
 - <u>YouTube channel</u> e.g. 2022 Coach Summit
- Hardware and software supplied by <u>VEX Robotics</u>
 - <u>YouTube channel</u>
 - **Discussion forums**
- <u>VEX Herobot Build Instructions</u>
- Ben Lipper's Channel
- <u>Other Full Volume Robot Videos</u>
- <u>2021-22 Example Match</u>

TOURNAMENT Dates

- Two EMS tournaments on January 7th & February 11th
 - Mandatory to EMS teams.
- Optional local tournaments from 12/02/23 to 2/24/24
- Potential to qualify for State (March) and Worlds (start of May)
- After-season club-organized game (end of March)

TOPICS COVERED IN CLUB MEETINGS

- Engineering notebook
- Structural design (theory & practical)
 - Chassis & arm construction
- Gearing basics
- Programming (blocks, text in C++)
- Tournament structure & strategy
- Presented by HS student coaches with VEX Worlds experience
- Club Meeting Materials:
 - Team robotics kit
 - Computer (school-issued is fine)

HOW TO JOIN ROBOTICS CLUB

The following process must be followed, step by step:

- 1. 3-5 students form a team (Club Chair <u>will not</u> form teams and <u>will not</u> force students onto other teams)
- 2. Find a parent/guardian willing to be team coach
- 3. Choose a team name
- 4. (Team Coach only) use <u>this link</u> to enter the team's information
- 5. (All students) complete <u>this permission slip</u> and submit to team coach
- 6. (Team Coach only) collect all slips and submit together to <u>robotics@evergreenptsa.org</u>
- 7. Upon receipt of payment and with all team members' permission slips, the team coach will be given a date and a time to pick up your robotics kit!

All steps must be completed **by September 18**. Registration might close early if the club maximum capacity is reached.

PARENT COACH COMMITMENTS

- Be a PTSA member (join here) and an <u>LWSD</u> <u>approved volunteer</u>
- Follow the <u>Student-Centered Policy</u> released by REC Foundation
- Register team with Club using this link
- Manage all team activities and (if possible) mentor technically
- Coordinate parents and students and communicate with club chairs
- Organize and supervise outside of school meetings
- Be responsible for the team and the team conduct outside school and at tournament events

REGISTRATION & EXPENSES

Per Student (paid to PTSA Robotics Club):

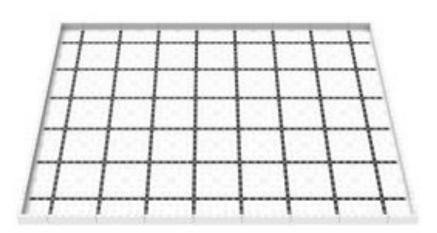
• \$40 Robotics club fee (covers parts expenses) collected at club registration

Per Team (paid to REC Foundation later):

- ~\$45 one-time registration fee with REC Foundation to enter VEX IQ tournaments
- \$50-60 per local tournament (registration fee)
- (Optional) field & game elements (\$654) for individual team use
- Potentially more expenses for state and world competitions if teams qualify and wish to attend (travel cost for hotel and flight etc.)

TOTAL COST (INCLUDING TAX & SHIPPING): \$654





Game Elements Set Order

Field (Reusable) Order

VOLUNTEERS

- Weekly Club Meeting Volunteers (Sep Feb)
 - Three volunteers, to supervise the students before the meeting, setup field, help students check out parts
- EMS Tournament Helpers (>40 volunteers per tournament)
- Team Coaches
- Company Matching Volunteer Hours