

Notes on preparing for a Vex IQ Event

What follows is a long list of tips and reminders in chronological order. But first a general note on behavior...

Gracious Professionalism

These two words sum up the behavior that is expected at the event. Cheering on your team is fine, but no taunting or booing. Note that the event is setup so that you will need to partner with many other teams and will never have a direct opponent. Cooperation is important. We will be representing our school and want to leave a good impression. Mentors stay calm, mistakes will be made, take it in stride.

Preparation - Day Before Event

- Charge robot batteries
- Charge Controller
- Organize kit of your parts
- Organize Engineering Notebook
- Make sure batteries, chargers, robot brain, and controller are labeled with team number in permanent marker
- Pack a power strip or power splitter

Setup At Event

- Arrive at venue when it opens so you have time to practice
- Each team will get a table where you can keep your stuff and repair your robot
- Keep your Engineering Notebook on your table, the judges will walk around during the competition and will ask to look at it
- Get your robot inspected
- Get your battery chargers setup. You probably won't have power at your table. The chargers of all the teams are usually in one place, that's why it is important to mark them
- There is a Drivers Meeting before the event starts, all students & mentors should attend
- Qualification match schedules will be distributed once all the teams have registered
 - Highlight the times of your matches
 - Decide who the drivers will be for each match and write them on the schedule
 - Each team has two drivers for each match
 - Everyone should get about same amount of drive time during qualifications
 - Make sure you always know the scheduled time of your next match and the match number
- If you are doing a STEM presentation, get that scheduled when you have a break between matches

Morning Matches

- Teamwork challenge matches usually start a few minutes after the drivers meeting
- The Teamwork Challenge is where you are randomly assigned a partner, you play together on the same field, and your points are combined
- Usually each team will have about 3 Teamwork Challenge matches in the morning and 3 in the afternoon
- While the morning matches are going on there will be a separate field for the Skills Challenge
 - The Skills Challenge is where your robot works by itself. You still have two drivers from your team, but no partner team
 - It is common for a long line will form for the Skills Challenge, first come, first served.

- Don't wait, get someone in line early
- They usually allow you to try as many times as you want, but you have to wait in line each time
- You really need to make the most of your time in the morning if your team has a STEM presentation. You won't have much time for the Skills Challenge.

Before each match

- Inspect your robot for damage
- Make sure battery is fresh
 - Don't just look at the battery icon. Go to the system menu on the brain and make sure the battery is at 80% or better.
- Keep all spare batteries on a charger charging
- Make sure correct the program is running on the robot

Lunch

- Lunch arrangements are different at every venue, but typically there is an option to pre-order a lunch, and there is usually a concession stand.

Afternoon

- 3 more Team Challenge matches
- While the afternoon matches are going on there will be a separate field for Programming Skills
 - Programming Skills is where your robot runs autonomously. The robot goes by itself, you don't use the controller at all.
 - Fewer teams participate in the Programming Skills, the line should be short
 - Sometimes there is one line for Programming or Robot skills

Finals

- The 10 or more teams with the best overall scores from the Teamwork Challenge matches will participate in the finals. The number of teams that make the finals depends on the number of teams at the event.
- Partners are automatically selected. The team with the #1 score is partnered with the #2 team. #3 partners with #4, etc,
- Each set of teams has one match to get their best score.
- Have a plan for selecting the drivers for the finals and make sure everyone on the team knows how the drivers will be chosen. Everyone will want to drive in the finals. Manage expectations ahead of time to lessen the disappointment of the team members that are not chosen.

Awards

- Awards are usually given out either during or after the finals matches.
- There are many awards and every team has a chance of winning something.