

Introduction

At VEX IQ Challenge events, students showcase their knowledge and skills in designing, building, repairing, and programming a robot, documenting their learning in an engineering notebook, and delivering a STEM Research Project presentation, with minimal adult assistance. While adults may assist students in urgent situations, they should never work on a robot or the research project without the students on that team being present and actively participating.

- Keep it simple and get the whole team involved in solving the VEX IQ Challenge.
- Provide plenty of time to practice with the robot and the STEM Research Project presentation.
- Everyone who participates in the VEX IQ Challenge is a winner. Enjoy the learning experience!

Preparing for the Event

- Review the details of the event on www.robotevents.com.
- Download consent forms, for each student and adult to complete, from the “VEX IQ Challenge Teams” page: www.roboticseducation.org/vex-iq-challenge/viq-teams/.
- Review the rules in the official Game Manual on the “Current Challenge” page: www.roboticseducation.org/vex-iq-challenge/viq-current-game/.
- Review and follow the requirements of the robot Inspection Checklist on the “Current Challenge” page: www.roboticseducation.org/vex-iq-challenge/viq-current-game/.
- Review and follow the guidelines for the STEM Research Project presentation on the “Current Challenge” page: www.roboticseducation.org/vex-iq-challenge/viq-current-game/.
- Install all robot firmware updates, available at www.vexrobotics.com/vexiq/software/firmware.
- Check Game ruling updates and share questions on the VEX IQ forum at www.vexiqforum.com/.
- Make sure your team members know their team number.
- Exchange event-day contact information with all team members.
- Plan to wear comfortable clothes and closed-toed shoes. Team shirts and costumes are cool!
- Use the event site details to make team lunch plans.
- Advise the event contact of any special accommodations that are required for your team.

Bring to the Event

- Enthusiastic and energetic students and adults.
- Signed consent forms for all students and adults.
- Engineering notebook. The completed notebook is submitted to the team check-in desk.
- Water and non-perishable snacks. Follow the food and drink policy for the event venue.
- Extension cords and power strips. Be careful to keep cords clear of walkways.
- A fully charged robot, with your robot license plate attached to two opposing sides. To purchase robot license plates, visit: www.vexrobotics.com/vexiq/products.
- Spare parts and the robot kit, labeled with your team number.
- Charged batteries and a charger. Assign a team member to monitor battery usage.
- Laptop computer and a download cable for robot programming.
- A watch, highlighter, clipboard, and a timekeeper assigned to keep your team on schedule.
- Protective eyewear is not required, but prepare your team for safe participation in the event.
- Materials required for your team’s STEM Research Project presentation. Make a copy of any engineering notebook pages that your team may use in its presentation.
- Decorations for your pit area. Giveaway items are optional.
- Camera to capture the action and memories.

At the Event

- Check in your team as soon as you arrive.
- Remind the event staff of any special accommodations required for your team.
- Give your team a sense of the event layout, including the location of the practice game fields, Information Desk, First Aid station, restrooms, and lunch area.
- Provide adult supervision of students at all times. Follow the event chaperone policies.
- Establish a meeting place at the event in case team members get separated.
- Get started by setting up your pit (practice) area. Keep your pit area neat and well organized.
- Keep track of your personal belongings.
- Get your robot inspected as soon as possible after check-in.
- Highlight your team number on your match schedule, so students are on time for robot matches.
- Make sure your team is scheduled for a Project presentation time that does not conflict with your robot matches. If a conflict develops, alert the Information Desk or Head Judge.
- Drink lots of water and eat snacks. Be sure to follow the venue food and drink policies.
- Share your team spirit, including cheers and dances.
- Take time to meet other teams. Share your learning experiences.
- Demonstrate courtesy and respect to the event staff and participants at all times.

Robot Matches and Project Judging

Things will happen beyond your team's control. Don't worry – that's to be expected.

- Give all interested team members an opportunity to drive the robot. One out of every four qualifying matches will not count toward the team's ranking.
- Know your team's robot match schedule. Don't be late to a match, as it will start without you.
- Make sure your robot is within the maximum allowed size throughout the match.
- The only team members permitted to be by the playing field are the two student drivers.
- An adult may chaperone the student drivers to the entrance of the playing field area and then be seated in a designated area to view the match. After the match has been scored, the drivers will be directed to the field exit to meet their chaperone.
- Follow the directions of the field managers and referees at the game field.
- Turn on the robot before the match starts.
- Have fully charged robot batteries – test them in the pits before the match.
- If the robot or programming doesn't work, check for firmware updates.
- Put the controller on the floor before touching the robot or reaching onto the field during the robot matches.
- Switch the controller between the two drivers halfway through the match.
- Upon arrival at the Skills Challenge field, advise the field staff of your team number and the Skills Challenge your team will try, Robot Skills or Programming Skills.
- Student drivers are the ones to share any scoring questions or concerns with the referee before the field is re-set. Referees will not review recorded replays of matches.
- Offer positive encouragement and support to all team members throughout the day. Make the event a great learning experience for everyone involved!

After the Event

- Celebrate your team's accomplishments.
- Keep in touch with new friends from the event and share your learning experiences.
- Prepare for great new learning experiences in the VEX IQ Challenge!

Thank you for your support of the VEX IQ Challenge!