

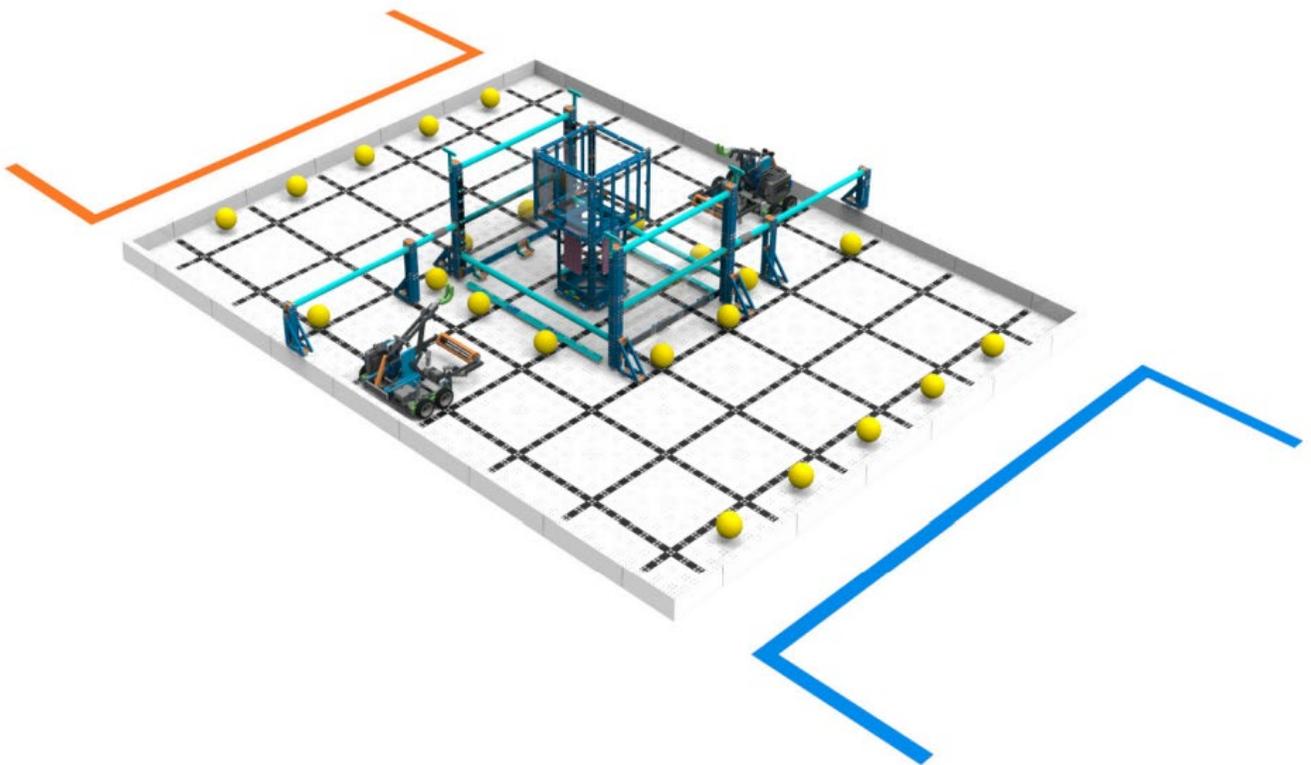
TSA VEX IQ Challenge National Championship at the 2022 National TSA Conference

TSA VEX IQ Challenge (TIQC) - Competition Guidelines

Overview

The VEX IQ Challenge (VIQC) is the largest and fastest growing middle school robotics programs globally. Each year, an exciting engineering challenge is presented in the form of a game. TSA VIQC teams - with guidance from their teachers and mentors - build innovative robots and may compete year-round in a variety of matches, including state competition and the TSA VEX National Championship event held at the annual national TSA conference.

Challenge



For the 2022 season, the VIQC game is '[Pitching In](#)'. Entries must be started and completed during the current school year.

VEX IQ Challenge Pitching In is played on a 6' x 8' (1.82m x 2.44m) rectangular field configured as seen above. Two robots compete in the Teamwork Challenge as an alliance in 60 second long teamwork matches, working



collaboratively to score points.

The scoring objects in VEX IQ Challenge Pitching In are 3” (7.62 cm) diameter Balls. There are a total of (22) Balls on the field. The object of the game is to score as many points as possible with your alliance partner by Scoring Balls in Goals, Clearing Corrals and Hanging at the end of the Match.

Teams also compete in the Robot Skills Challenge where one robot takes the field to score as many points as possible. These matches consist of Driving Skills Matches, which will be entirely driver controlled, and Programming Skills Matches, which will be autonomous with limited human interaction.

Participants design and build a robot using the engineering design process. Robots should be structurally efficient, capable of scoring in both robot and programming modes of operation, and demonstrate collaboration and communication skills in teamwork matches.

Eligibility

- A. All TSA VIQC team members must be affiliated with the same TSA chapter for the current school year.
- B. Teams must affiliate with TSA for the current school year.
- C. Teams must register as a TIQC team, via robotevents.com by May 15, 2022 to be eligible to participate in the 2022 TSA VEX National Championship.

Note: Registration on Robot Events is free.

- D. Participants are limited to two (2) teams per chapter, with a minimum of two (2) and a maximum of six (6) participants per team.

Attire

Competition attire, as described in the national TSA dress code (www.tsaweb.org/Dress-Code), is required for the duration of the event. Teams will be subject to a 20-point deduction in their final Excellence Award Score for any violation.

Procedure

- A. TSA event registration: TSA state advisors approve and submit eligible VIQC teams for the national TSA VEX Championship event based on advancement guidelines. Additional teams may be waitlisted by TSA state advisors.
- B. Check-in: Participants check in their robots at the time and place stated in the TSA conference program.
- C. Inspection: Robots are inspected using official VIQC inspection sheets. Students are present for the robot inspection. Robots must pass inspection in order to be eligible for competition. Repairs and adjustments may be made by students only, as required, in order for robots to pass inspection. Inspection must be completed within the designated timeframe and before a team competes in any component of the



competition. Re-inspection of a robot may be ordered at any time throughout the competition by a referee to verify that a robot meets inspection requirements.

- D. Tournament Play: Follows the rules set forth in the VIQC Pitching In [game manual](#).
- E. Excellence Award: Judges review the team's Robot Skills score and the score of the team's submitted Engineering Notebook to determine the best overall TIQC team. Competition attire and team conduct throughout the event will be factors in the Excellence Award.

Additional Information

To register a VIQC Team, visit: robotevents.com

To find out more about the VIQC game, 'Pitching In', visit:

- [Game Manual](#)
- [Game Video](#)
- [Field Appendix](#)