TSA VEX IQ Competition National Championship at the 2023 National TSA Conference

TSA VEX IQ Competition (TIQC) Competition Guidelines

Overview
The VEX IQ Competition (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 VEX IQ (TIQC) teams, with guidance from their teachers and mentors, build innovative robots and may compete year-round in a variety of matches, including a State Competition and the TSA VEX National Championship event held at the annual TSA National Conference.
Competition

For the 2022-2023 season, the VIQC game is ‘Slapshot’. Entries must be started and completed during the current school year. VEX IQ Competition (VIQC) Slapshot is played on a 6’ x 8’ rectangular Field, set up as illustrated in the figures throughout the game manual. The scoring objects in VEX IQ Competition Slapshot are orange plastic Disks 2.5” (6.35 cm) in diameter. The object of the game is to score points by Removing Discs from Dispensers, by placing Discs into Goal Zones, and by getting Contact Bonuses at the end of the Match.

In the Teamwork Challenge, an Alliance composed of two (2) Robots works together to score as many points as possible in a sixty (60) second Match. Teams may also compete in Robot Skills Challenge Matches, where one (1) Robot tries to score as many points as possible. Robot Skills 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.

At the National Conference, Engineering Notebooks will be submitted digitally. For instructions on how to do this, please visit the REC Library. Submission deadline is June 20, 2023.

Eligibility

- All TIQC team members must be affiliated with the same TSA chapter for the current school year.
- Teams must affiliate with TSA for the current school year.
Teams must register as a TIQC team, via RobotEvents.com by March 1, 2023 to be eligible to participate in the 2023 TSA VEX National Championship. Note: Registration on Robot Events is free.

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, 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
- TSA event registration: TSA state advisors approve and submit eligible TIQC teams for the TSA VEX National Championship event based on advancement guidelines. Additional teams may be waitlisted by TSA state advisors.
- Check-in: Participants check in their robots at the time and place stated in the TSA conference program.
- 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.
- Tournament Play: Follows the rules set forth in the VIQC Slapshot Game Manual
- 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 TIQC Team, visit: [www.RobotEvents.com](http://www.RobotEvents.com)
- To learn more about the VIQC game, ‘Slapshot’, visit the [REC Library](http://REC Library)