

## Overview

Leagues provide multiple opportunities for a group of teams to actively learn about science, technology, engineering, and mathematics (STEM) through participation in the exciting VEX IQ Challenge. Leagues are events with three (3) or more Ranking Sessions plus a Championship Session. Sessions are usually only a few hours long and are scheduled several weeks apart to give teams an opportunity to improve their robot designs and game strategies. For the official description of an Event and definitions of terms used in this document, please see the official Game Manual at: <http://www.roboticseducation.org/competition-teams/vex-iq-challenge/>.

## How to Organize a VEX IQ Challenge League

- Develop interest in starting a League among local VEX IQ Challenge teams.
- Form a League Planning Team to select dates and sites for at least four (4) sessions:
  - Leagues may offer additional robot building/practice session(s) prior to the Ranking Sessions.
  - Three (3) or more Ranking Sessions must include Teamwork Challenge Qualification Matches and can include Skills Matches. Teamwork Challenge Rankings are cumulative for all Sessions and are based on average Qualification Match scores.
  - The Championship Session includes the Teamwork Challenge Finals Matches and Judging and may include additional Teamwork Challenge Qualification Matches and/or Skills Matches.
  - To reduce the field and/or volunteer resources required at the Ranking Sessions and Championship Session:
    - Skills matches can be offered at Ranking Sessions, at an additional session, and/or at the Championship Session.
    - STEM Research Project judging can be offered at an additional session or at the Championship Session.
- The Planning Team oversees the budget, volunteer recruitment, and team communications.
- Identify a League Event Partner (EP) to coordinate the Planning Team, serve as a liaison to the Regional Support Manager (RSM), and manage the league on [RobotEvents.com](http://RobotEvents.com).
- Secure one or more locations and reserve the facilities needed for each session.
- Determine the League registration fee needed to cover the anticipated League expenses including facility usage fees, required maintenance and security staff, food for volunteers, etc.

## VEX IQ Challenge League Registration

- The EP contacts the RSM about plans for the league. The RSM provides appropriate training resources for the EP and activates the EP's account on [RobotEvents.com](http://RobotEvents.com).
- The EP posts the league on [RobotEvents.com](http://RobotEvents.com) and notifies the RSM. The RSM reviews the league, the EP makes any necessary corrections, and the RSM approves the league.
- The League opens for team registrations on [RobotEvents.com](http://RobotEvents.com) as scheduled.
- For teams to participate in League events, registration is a two step process:
  1. Register a VEX IQ team on [RobotEvents.com](http://RobotEvents.com) and pay the registration fee of \$100 for the first team \$50 for each additional team from the same school or organization.
  2. Register for the League event on [RobotEvents.com](http://RobotEvents.com) and pay the registration fee.
- Signed consent forms for all students, adult leaders, and League volunteers must be submitted to the check-in desk at the first League session that they attend. Download the forms at: [RoboticsEducation.org/event-partners/event-partner-resources-documents/](http://RoboticsEducation.org/event-partners/event-partner-resources-documents/).

## Requirements for VEX IQ Challenge Official Qualifying Events, Including Leagues

- Listed as a VEX IQ Challenge event with online registration hosted on [RobotEvents.com](http://RobotEvents.com).
- Open for registration on [RobotEvents.com](http://RobotEvents.com) for a minimum of eight (8) weeks prior to the event date and posted no later than **November 1, 2016**.
- Held between **June 1, 2016**, and at least two weeks prior to the state/provincial/regional/national championship event, and no later than **February 26, 2017**.
- All teams must have registered and paid their 2016-17 team registration fees on [RobotEvents.com](http://RobotEvents.com) before participating in official VEX IQ Challenge events. All teams must also display official robot license plates at official events.
- Event registrations and payments on [RobotEvents.com](http://RobotEvents.com) must be completed by the event deadline, typically one week prior to the event.
- Tournaments and Leagues with more than 35 teams participating offer Driving and Programming Skills Challenge Matches. Skills Challenge Matches are highly recommended for all events.
- Follow the rules outlined in the official Game Manual. Download the Game Manual at: [Roboticseducation.org/competition-teams/vex-iq-challenge/](http://Roboticseducation.org/competition-teams/vex-iq-challenge/).
- Upload Tournament Manager award results to [RobotEvents.com](http://RobotEvents.com). The REC Foundation anticipates that EPs will upload their event results within 48 hours of the end of the event.
- In order for any official event to offer the Excellence Award, it must also offer the Design and STEM Research Project Awards.

## Additional Requirements for VEX IQ Challenge Official Qualifying Leagues

- New Leagues must have a minimum of 16 teams participating, existing Leagues must have a minimum of 24 teams participating.
- No school or organizations can have more than 25% of the total number of teams in the League.
- At least three (3) Ranking Sessions include Teamwork Challenge Qualification Matches; four (4) or more Ranking Sessions are recommended.
- Each Ranking Session includes at least three (3) Teamwork Challenge Matches per team.
- To be included in the cumulative Qualification Rankings, a Ranking Session must include the participation of at least 50% of the League's registered teams.
- The Championship Session includes Teamwork Challenge Finals Matches.
- Teams must participate in at least 60% of the scheduled Teamwork Challenge Qualifying Matches to be eligible for awards or to participate in Teamwork Challenge Finals Matches.
- To learn how to use **Tournament Manager for Leagues**, please read the document with that name at:  
[RoboticsEducation.org/event-partners/event-partner-resources-documents/](http://RoboticsEducation.org/event-partners/event-partner-resources-documents/).

## Qualifying for Championship Events

Below are guidelines for qualifying teams to a state/regional/provincial championship event. These numbers will be adjusted by region based upon championship event capacity, in addition to the number, and size, of qualifying events feeding into the state/regional/provincial/national championship event. Please consult your regional support manager for more information.

Official Leagues must offer judged awards to be eligible for qualification spots in a championship event.

- Leagues with 16-23 participating teams may qualify **two (2) teams**, Teamwork Champions, to the championship event.
- Leagues with 24-35 participating teams may qualify up to **three (3) teams**, to include one (1) Excellence Award recipient and two (2) Teamwork Champions.
- Leagues with 36 or more participating teams may qualify up to **five (5) teams**, including the Excellence Award recipient, the (1) STEM Research Project Award recipient, the (1) Design Award recipient, and two (2) Teamwork Champions.
- In order for any official league to offer the Excellence Award, it must also offer the Design and STEM Research Project Awards.

## Event Resources

- For game-related documents such as the Game Animation, Game Manual, Field Appendix, and Build Instructions, please see the current game at: [RoboticsEducation.org/competition-teams/vex-iq-challenge/](http://RoboticsEducation.org/competition-teams/vex-iq-challenge/).
- For event documents such as the EP Guide, Sample Event Layouts, Pre-Event Checklist, Event Day Checklist, Volunteer Staffing Guide, Inspectors Guide, Inspection Checklist, Referee Guide, Judge Guide, Awards Appendix, STEM Research Project, Award Rubrics, Tournament Manager User Guide, Event Manager User Guide, and Tournament Manager for Leagues, please visit: [RoboticsEducation.org/event-partners/event-partner-resources-documents/](http://RoboticsEducation.org/event-partners/event-partner-resources-documents/).
- For additional information contact your REC Foundation Regional Support Manager. You can find contact information for your RSM at: [RobotEvents.com/support](http://RobotEvents.com/support).

## Tips and Best Practices

### Schedule and Venues

- Select dates and times that are convenient for most teams. Weekday sessions after school can work well for many leagues.
- Space sessions several weeks apart to allow teams time to consider and implement robot design and game strategy improvements.
- Schedule time, and perhaps an entire session, for practice to provide a learning experience for the teams, as well as for event volunteers!
- Have several teams host League sessions. Select venues convenient for most teams.
- For large Leagues (36 or more teams), consider dividing the League into elementary and middle school divisions, if enough teams will participate in each division to meet the official League requirements.

### League Sessions

- Share fields, game elements, and human resources to enhance team, event, and volunteer experiences.
- Schedule each team to not participate in one session so that the coaches and parents can serve as volunteers.
- Allow as many teams as possible to participate in Teamwork Finals Matches.
- VEX IQ Challenge game fields are easy for students to help set up, reset between matches, take down, and store. Before the start of matches, have your referee and/or League Event Partner review the field(s) to ensure that the set up meets the Game Manual requirements.
- Start simple. One laptop computer running Tournament Manager connected to one projector on a wall can work well for small Leagues. Extend the desktop to the projector and view the Audience Display full screen on the projector.
- Computer speakers connected to the computer can provide audible game sounds. Connect the speakers to the computer running Audience Display.
- For larger events, a second computer and monitor/projector can display the Teamwork Challenge Qualification Rankings and/or Skills Rankings. Extend the desktop to the projector and view the Pit Display full screen on the projector.
- For events with technical expertise and access to an appropriate router and tablets, the use of tablet scoring can enhance the event experience.
- Fuel the fun. Provide food and drinks for volunteers. Selling snacks can be a fundraiser.