

### 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 Robotics Competition. Leagues are events with three (3) or more Ranking Sessions plus a Final League 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-robotics-competition/>

### How to Organize a VRC League

- Develop interest in starting a League among local VEX VRC teams.
- Form a League Planning Team to select dates and sites for the ranking and Championship sessions.
  - Leagues may offer additional robot building/practice session(s) prior to the Ranking Sessions.
  - Three (3) or more Ranking Sessions must include Qualification Matches and can include Skills Matches. Rankings are cumulative for all Sessions and are based on win percentage
  - The Championship Session may include additional Qualification matches, alliance selection and Eliminations following the standard VRC Format.
- The Planning Team oversees the budget, volunteer recruitment, and team communications.
- Identify a League Event Partner (EP), who coordinates the Planning Team, serves as a liaison to the Regional Support Manager (RSM), and manages 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.

### VRC League Registration

- The EP contacts the RSM about plans for the league. The RSM provides appropriate training resources for the EP and activates the EPs 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 VRC 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.
- A signed consent form, for all students, adult leaders, and League volunteers, must be submitted to the check-in desk at the first League session that they attend. To download the form, please visit:  
<http://www.roboticseducation.org/documents/2013/06/vrc-participant-release-form.pdf>
- Be listed as a VRC event with online registration hosted on [RobotEvents.com](http://RobotEvents.com).

- Be an event held between **June 1, 2016**, and two weeks prior to the State/Regional/Provincial Championship event for which they will qualify.
- All teams participating at the event have completed their 2016-17 VRC Team registration. Teams will not be able to register for events until their Team Registration is completed and paid via credit card, check, or purchase order.
- Posting Deadline: Official Qualifying Events must be posted on [RobotEvents.com](http://RobotEvents.com) by **Nov 1, 2016** and be open for registration at least 8 weeks in advance of the event.
- [RobotEvents.com](http://RobotEvents.com) registrations and payments must be completed a minimum of one week before any event, at which point online registration/payment will be unavailable. Teams may still be added to an event manually by the event partner, but event fees for those teams must be paid directly to the Event Partner and cannot be processed on [RobotEvents.com](http://RobotEvents.com).
- Tournaments and Leagues with more than 35 teams participating offer Driving and Programming Skills Matches. Skills Matches are highly recommended for all events.
- The event must follow the Official Rules in the Game Manual (including tournament/alliance selection guidelines). To download the Game Manual, please visit: [RoboticsEducation.org/event-partners/event-partner-resources-documents/](http://RoboticsEducation.org/event-partners/event-partner-resources-documents/)
- Upload Tournament Manager award results to [RobotEvents.com](http://RobotEvents.com). Tournament Manager results must be uploaded within 48 hours of event completion.
- **Tournament Manager for Leagues**, is located in the Event Partner Documents

## Additional Requirements for VRC 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 and a League Championship Session.
- Each Ranking Session includes at least four (4) 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. Teams must participate in at least 60% of the scheduled Qualifying Matches to be eligible for awards or to participate in the League Championship.

## Qualifying for Championship Events

Below are guidelines for qualifying teams to a state/regional/provincial championship. These numbers will be adjusted by region based upon championship event capacity, 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 awards to be eligible for qualification spots in a championship event.

- Official Leagues with 16-23 teams **may** qualify **two (2) teams**, the Tournament Champions, from a two team alliance for the State/Regional/Provincial Championship.
- Official Leagues with 24-35 teams **may** qualify up to **three (3) teams**, for the State/Regional/Provincial Championship including the Excellence Award winner and two (2) Tournament Champions from a two team alliance.
- Official Leagues with 36 or more **may** qualify up to five **(5) teams**, for the State/Regional/Provincial Championship, Excellence, Design, three Tournament Champions.
- In order for any official league to offer the Excellence Award, it must also offer the Design Award.

**All awards are judged at the League Championship.**

## **Offer Practice Time and Skills Matches**

- Skills matches are encouraged at each Ranking session if time and resources allow.
- Practice sessions make the 1st session easier.

## **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-robotics-competition/](http://RoboticsEducation.org/competition-teams/vex-robotics-competition/)
- 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, 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)

## **Use a Competition Switch to Run the Game**

If you don't have time to setup the field electronics for these quick after school events just use a competition switch! It's quick and easy! Tournament Manager is required for recording all scores at EVERY event

## League Sessions

- Sharing resources enhances team, event, and volunteer experiences.
- Schedule each team to not participate in one session so that other teams can be volunteers.
- Allow as many teams as possible to participate in The Championship event.
  - Run alliance selection and the elimination tournament at the League Championship just like any other VRC event.
  - With a playoff only final day, leagues can have many more 2 team alliances in the playoffs. League Championships will have **2 team** alliances for leagues with 35 teams or less. Alliances are encouraged to be expanded to include all teams. Leagues with 36 or more teams will have **3 team** alliances.
  - Make sure that all teams attending the finals (**which should be as many as possible**) participate in the alliance selection process.
- Start simple. One laptop computer running Tournament Manager connected to the field and 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 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.

## 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!
- Encourage several teams to host League sessions. Select venues convenient for most teams.
- For large Leagues (36 or more teams), consider dividing the League into HS/MS divisions, if enough teams will participate in each division to meet the official League requirements.
- Consider a back-to-back arrangement. Have a regular VEX event on a Saturday, use the already set up field for the League on Sunday afternoon. Disassembly of the field occurs after the event. This allows the League less setup time and more play time. This same format can be used with a League event on Friday evening and the regular VEX event on Saturday. Sharing resources is always important.
- Store and transport field perimeter in 12' sections.
- Consider a "Set up Crew" that is the same each week. Divide the crew into several work groups: Perimeter, Field tiles, Wiring, Game Structure, Game pieces, and Computer/display.

## Feedback

Please consider posting suggestions in the League Play section at [VEXForum.com](http://VEXForum.com). For additional information contact your Regional Support Manager or REC Foundation Support Manager.