



ROBOTICS EDUCATION &
COMPETITION FOUNDATION

League Play Guide

2018-2019



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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 and VEX IQ Challenge. Leagues are events with three (3) or more Ranking Sessions plus a Final League Championship Session. Ranking 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.

Many of the guidelines in this guide can also be found in the Qualifying Criteria documents which this guide is based off of. In the event that a rule seems to be different in this guide than in the Qualifying Criteria documents, the Qualifying Criteria documents supercede this guide. The purpose of this guide is to help an Event Partner understand not only the guidelines, but best practices of hosting a league.

LEAGUE CRITERIA

Official Leagues must meet the following criteria:

Registration

The following registration requirements must be met for leagues to be qualifying.

1. Listed as a League with online registration hosted on RobotEvents.com.
2. Comprised of teams that have completed their 2018-19 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.
3. Required to have at least 16 registered teams. League Ranking Sessions may have less than 16 teams participating, if the league has the required 16 registered teams.
4. Leagues that have fewer than 6 organizations registered, might earn fewer spots than Tournaments of equal size to keep the balance of teams having the opportunity to qualify for the State/Regional/Provincial/National Championship.
5. Tournament Manager results must be uploaded within 48 hours of event completion.
6. RobotEvents.com registrations and payments must be completed before any event. The Event Partner must mark teams as **Paid** on RobotEvents.com for any team that pays the Event Partner directly. This includes payment by trades and deals allowed by the Event Partner. The Event Partner does not have to accept direct payments and can require all teams to pay through Robot Events.

Dates and Deadlines

Qualifying leagues must abide by the following dates and deadlines:

1. Held between **June 1, 2018**, and two weeks prior to the State/Regional/Provincial/National Championship event for which they will qualify.
2. **Posting Deadline:** Official Qualifying Leagues must be posted on RobotEvents.com by **October 1, 2018** and be open for registration at least 8 weeks in advance of the event.

Rules and Guidelines

Qualifying leagues must follow the rules and guidelines in these documents and manuals:

1. Leagues are encouraged to have multiple unique match play dates; the required minimum is 3 Ranking Sessions and a Final League Championship Session.
2. Official Game Manual.
3. Judge Guide and judging rubrics.
4. For Alliance Selection Ranking, teams that participate in fewer than 60% of all Qualifying Matches will be ranked lower than teams that participate in more than 60% of all Qualifying Matches.

Note: In order for the league to award an Excellence Award, the league must also offer a Design Award.

Robot Skills

Robot Skills at events should follow these guidelines:

1. Leagues with 24 or more teams registered, must offer Driving and Programming Skills Challenge Matches. Skills Challenge Matches are highly recommended for all leagues.
2. Any league offering the Robot Skills Challenge must offer both Driving and Programming Skills Challenge attempts to attending teams. The recommended maximum number of matches is 3 of each skill.
3. Skills Challenge scores for all official qualifying leagues will be included in the World Skills Standings on RobotEvents.com.
4. Teams can only play in Skills Matches if they are also included in the match schedules during Ranking Sessions. Teams may not skip their Qualifying Match to play in a Skills Match.

Note: From time to time, the REC Foundation may make an exception to one of these criteria to better support a growing State/Province/Region/Nation. For more information, please contact your REC Foundation Regional Support Manager.

HOW TO ORGANIZE A LEAGUE

Event Partners, with support from their Regional Support Manager, are responsible for hosting leagues:

1. Develop interest in starting a league among local teams.
 - Teams must commit to playing together multiple times.
 - Teams will then know that they have a place to play and not be concerned with other tournaments “filling up.”
 - There are no organizational restrictions on how many different groups need to play in organizing a league. Organizations with a large number of teams may have the ability to register all of their teams to the league. It is up to the Event Partner as to how many teams can register from a single organization and how many total teams can play in the league.

2. Form a Planning Team to select dates and venues for the Ranking and Championship sessions.
 - The Event Partner does not need to be the only one hosting a session. Find other Event Partners who are willing to host one or more of the sessions to spread the workload.
 - The Planning Team will need to oversee the budget, volunteer recruitment and communication to the teams
3. Determine how many Ranking sessions will be played.
4. Secure facilities needed for each session including the Championship session.
5. Determine how many awards will be given.
6. Determine when teams will be interviewed for judged awards.
7. Determine when teams will play their Robot Skills Matches and the maximum number of Skills match plays each team will be allotted.
8. Determine the League Registration Fee, considering the following.
 - The cost of each venue and associated costs of that venue including custodial fees
 - The cost of fields and game elements
 - The cost of trophies
 - The cost of food for volunteers and possible volunteer apparel
 - Other revenue streams such as concessions and sponsorships

EVENT RESOURCES

All documents can be found on the Event Partner Resources & Documents page of <https://www.roboticseducation.org/> in the Event Partner menu. The below resources are a sample of what can be found.

1. Game Manual, Field Appendix
2. Judges Guide including rubrics
3. EP Guide, Sample Event Layouts, Equipment Layout Guides including the use of Raspberry Pi
4. Trouble Shooting Guides
5. Pre-Event Checklists
6. Tournament Manager for Leagues
7. Event Meeting Announcements
8. Inspection and Score Sheets

QUALIFYING STRUCTURE

Most leagues will qualify teams to their State, Regional, Provincial or National Championship.

Spots

Because each region in the World is different in the number of teams participating and the number and size of their Championship events, the number of spots each league will have to qualify teams to that Championship event are different. The general guidelines below will be used to determine how many spots each league receives. The Regional Support Manager has the ultimate authority on how many spots each league receives.

1. The capacity of the State/Regional/Provincial/National Championship event must be considered so that the Championship event does not fill beyond capacity. It is important that when a team qualifies into their Championship event, there is still capacity remaining for that team to register.
2. The number of other events in the region that feed into the Championship event need to be considered, for the same reasons as above.
3. The percentage of teams in the league as compared to the region, so that all teams from the region have an equal opportunity to qualify into the Championship event. (e.g. If only 16 teams play in multiple leagues, in a region that has 100 teams, those 16 teams should have just as much opportunity to qualify as the other 84 teams who attend the same number and size events.)
4. A league should be treated the same way as a Tournament event when determining the number of spot allocated to each. The exception is when a league does not have 6 organizations attending, then there is not equal representation and therefore, less spots might be given to that league so that all teams from the region have the same opportunities to qualify.
5. For any league to offer the Excellence Award, it must also offer the Design Award.
6. If a league does not have offer Judged awards, then only the Tournament/Teamwork Champions can qualify, if spots are granted to that league based on all of the above conditions.
7. Below is an example of what a Regional Support Manager could allocated to leagues in a region
 - Official Leagues with 16-23 teams **may** qualify **two (2) teams**, including only the Tournament/Teamwork Champions from the two-team alliance
 - Official Leagues with 24-35 teams **may** qualify up to **three (3) teams**, including the Excellence Award winner and two (2) Tournament/Teamwork Champions from the two-team alliance
 - Official Leagues with 36 or more **may** qualify up to four **(4) teams**, including the Excellence Award winner, Design Award Winner, and two (2) Tournament/Teamwork Champions from the two-team alliance

VIQC Spot Levels

The table below shows which awards qualify based on the number of spots given to the league in VIQC.



Spot Level	Excellence Award *	Teamwork Champion	Design Award	STEM Research Project	Robot Skills Champion	TW 2 nd Place	TW 3 rd Place	Amaze, Think, Innovate	TW 4 th 5 th Place	Build, Create **
1 Spot	1	-	-	-	-	-	-	-	-	-
3 Spots	1	2	-	-	-	-	-	-	-	-
4 Spots	1	2	1	-	-	-	-	-	-	-
5 Spots	1	2	1	1	-	-	-	-	-	-
6 Spots	1	2	1	1	1	-	-	-	-	-
7 Spots	1	2	1	1	-	2	-	-	-	-
8 Spots	1	2	1	1	1	2	-	-	-	-
9 Spots	1	2	1	1	-	2	2	-	-	-
10 Spots	1	2	1	1	1	2	2	-	-	-
11-13 Spots	1	2	1	1	1	2	2	1-3	-	-
15 Spots	1	2	1	1	1	2	2	3	2	-
17 Spots	1	2	1	1	1	2	2	3	4	-
18-19 Spots	1	2	1	1	1	2	2	3	4	1-2

VRC Spot Levels

The table below shows which awards qualify based on the number of spots given to the league in VRC.



Spot Level	Excellence Award	Tournament Champions	Design Award	Robot Skills Champion	Tournament Finalists	Semi Finalist	Amaze, Think, Innovate, Build, Create**
1 Spot	1	-	-	-	-	-	-
3 Spots	1	2	-	-	-	-	-
4 Spots	1	2	1	-	-	-	-
5 Spots	1	2	1	1	-	-	-
6 Spots	1	2	1	-	2	-	-
7 Spots	1	2	1	1	2	-	-
10 Spots	1	2	1	-	2	4	-
11 Spots	1	2	1	1	2	4	-
12-16 Spots	1	2	1	1	2	4	1-5

BEST PRACTICES

Leagues have been around for many years, and below are suggestions based on what has been successful throughout the years.

Registration

1. Open the League Registration on Robot Events as soon as possible, more than 8-weeks before the first Ranking Session.
2. Do not limit your capacity to the smallest venue, instead encourage teams to take turns sitting out one of the Ranking Sessions. Then use those teams to be the event volunteers in non-refereeing and non-judging roles.

Ranking Sessions

1. Share resources. Just because it is your event this week, does not mean that you have to create everything new. Use equipment, volunteers, and ideas from the other sessions as a starting point.
2. Keep things as simple as possible.
 - a. Run VRC fields on a competition switch
 - b. Use 1 computer with a single Audience display
 - c. Only play 4 Qualification Rounds, then be done.
 - d. For those with technical expertise, use tablet scoring for quick scoring and verification
3. Start with a Practice Session before a Ranking Session to have a thorough orientation
4. Plan for time to do inspections.
5. Do not assign pits, simply have tables ready for the teams to choose their own location, with charging stations either around the room, or at each table.
6. Do NOT do any judging during the Ranking Sessions. Save this for the Championship Session.
7. Only do Robot Skills Challenge Matches at Rankings Sessions if all Ranking Sessions will do Robot Skills Challenge Matches. If teams do not participate in some sessions, then there will be an advantage to going to one Ranking Session over another one if some sessions have Skills and other sessions do not.
8. Provide drinks and snacks for volunteers

Championship Session

1. Start the session with Judging and Robot Skills Challenge Matches. Once Judging and Skills are both completed, then continue to the Alliance Selection for VRC or Elimination/Finals Matches for VEX U and VIQC.
2. Involve as many teams in the Elimination and Finals Rounds. All alliances are 2-team alliances except for VEX U, which is one team with two robots
3. In VRC, when choosing Brackets, choose either 8, 10, 12, 14, or 16 seed brackets. Do not go above 16 seeds or the bracket will become confusing to the spectators and teams.
4. Print out Certificates for awards that you want to give out that you do not have trophies for. These can be found in the Reports section of Tournament Manager, and will auto fill the winners to make an official certificate with the team number and names filled in.
5. Provide drinks and snacks for volunteers