League Play Guide
2019-2020
Table of Contents

Overview ........................................................................................................................................... 1

League Criteria .................................................................................................................................. 1
  Registration ...................................................................................................................................... 1
  Dates and Deadlines ....................................................................................................................... 1
  Rules and Guidelines ...................................................................................................................... 2
  Robot Skills ...................................................................................................................................... 2

How to Organize a League .............................................................................................................. 3

Event Resources ............................................................................................................................ 4

Qualifying Structure ........................................................................................................................ 4
  Spots ................................................................................................................................................ 4
  VIQC Spot Levels ........................................................................................................................... 5
  VRC Spot Levels ............................................................................................................................ 6

Best Practices ..................................................................................................................................... 6
  Posting the League on RobotEvents.com ....................................................................................... 6
  Registration ....................................................................................................................................... 7
  Ranking Sessions ............................................................................................................................. 7
  Championship Sessions ............................................................................................................... 7
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. 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 2019-20 VRC or VIQC 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. Contact your Regional Support Manager for how this will be handled in your region.
5. Tournament Manager results must be uploaded within 48 hours of completion of each Ranking Session and the Championship Session.
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, 2019, 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, 2019 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. (Note: Ranking Sessions do not need to be on separate days. It is allowable to have one ranking session in the morning and one ranking session in the afternoon of the same day and be counted as having had two Ranking Sessions that day. These would be listed as separate sessions with the same date on Robot Events.)
4. For Alliance Selection Ranking in VRC or Finals Matches for VIQC, 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.
5. Refer to the VRC Qualification Criteria document to determine the number of VRC alliances.

Note: 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 maximum number of matches is 3 of each skill per Ranking Session and Championship Session.
   a. If Robot Skills is only offered at the Championship Session, select “3” under the Maximum Number of Robot Skills Attempts in the TM setup process.
   b. If Robot Skills is offered at both Ranking Sessions and the Championship Session:
      ▪ The Event Partner will select “0” (unlimited) for the Maximum Number of Robot Skills Attempts in the TM setup process. This will allow Robot Skills attempts in all league sessions.
      ▪ Event Partners should develop a method for tracking Robot Skills attempts in each League Ranking and Championship Session to ensure Teams do not exceed (3) Driver and (3) Programming Skills attempts at any one League Session. These methods may include a Punch-Card System to mark Skills runs or a tracking sheet at the Robot Skills scoring desk. TM includes a report that shows all Robot Skills Scores with times and dates (Reports -> Skills Challenges -> All Skills Scores with Times).
      ▪ Robot Skills scores need to be preserved for each league session (do not delete).
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. Judged awards are optional.
6. Determine when teams will be interviewed for judged awards.
7. Determine when teams will play their Robot Skills Matches during the Ranking Sessions and/or Championship session.
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

9. Coordinate with your RSM to post your League on Robot Events. You will need to know the League session dates and venue(s).
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
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 spots 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 offer Judged awards, then only the Tournament/Teamwork Champions can qualify, if spots are granted to that league based on all the above conditions. In some regions, the Robot Skills Champion may also qualify.
7. Below is an example of what a Regional Support Manager could allocate 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.

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

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

<table>
<thead>
<tr>
<th>Spot Level</th>
<th>Excellence Award</th>
<th>Tournament Champions</th>
<th>Design Award</th>
<th>Robot Skills Champion</th>
<th>Tournament Finalists</th>
<th>Semi Finalist</th>
<th>Amaze, Think, Innovate, Build, Create**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Spot</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3 Spots</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4 Spots</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Spots</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6 Spots</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7 Spots</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>10 Spots</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>11 Spots</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>12-16 Spots</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Best Practices

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

Posting the League on RobotEvents.com

1. Ensure you have the league dates and venues selected for the Ranking Sessions and Championship session.

2. When creating a League on RobotEvents.com, use the first Ranking Session date as the first “Start” and “Stop” Date.

3. To add the additional League Ranking and Championship sessions, select “+New Date” and repeat the process for each session. You can specify different locations for each league session. All the league session dates will need to be added in this manner before the league can be approved.

4. The Agenda Content Block should include the agendas for the Ranking Sessions and the Championship sessions.

5. Review the Event Partner Guide for Posting Events on Robot Events for more detailed instructions on posting an event.
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 if you do not have field electronics.
   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. It’s recommended to provide drinks and snacks for volunteers. A happy and well-fed volunteer is likely to help at a future event!

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 per the VRC Qualification Criteria.
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. It’s recommended to provide drinks and snacks for volunteers. A happy and well-fed volunteer is likely to help at a future event!