ROBOTICS EDUCATION &
COMPETITION FOUNDATION

Qualifying Criteria

VIQC, VRC, and VEX U

2020-2021

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2020-21 Qualifying Criteria

OVERVIEW

Both teams and events must meet the criteria in this document to qualify for participation in the 2020-2021 Championship events (i.e. State, Regional, Provincial, and/or National Championship events). Events are considered "official" if they meet these criteria and the results of those events may be used to qualify teams to Championship events. Events that do not follow the criteria will not be official and the results will not upload to robotevents.com.

The Event Region Allocation of VEX Worlds 2021 spots will be posted **November 2020**.

This document will have a scheduled update on **January 15, 2021**. This update will only include any changes to VEX Worlds spot allocations and add more spots to the award table if necessary.

Note: From time to time, the Robotics Education & Competition (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 (RSM) here.

EVENT REGIONS

Teams are assigned into Event Regions based on geography and the density of teams in that area. Sometimes an Event Region is a state or province, other times it is an entire country. When an Event Region is small, there might not be a Championship event to determine which teams qualify for VEX Worlds. In the same regard, when an Event Region is large, there might be multiple championship events in that Event Region. Be sure to check with your RSM to learn the specifics of your Event Region's championship event(s) and if qualification into these events is required. Common names for these championship events would be State, Provincial, National, or Regional Championships.

EVENT TYPES

Events are either created as Tournaments or Leagues in robotevents.com. The following are names typically given to events that fall into one of those two categories.

- **Leagues** are events that have Ranking Sessions for teams to play in Qualifying Matches, and then a League Finals Session to determine the League Champions. Not every team in the League must play at all Ranking Sessions and is a way for a Tournament to be scheduled over multiple days at different venues, with different teams participating in each of those venues.
- **Scrimmages** are events that are not official and do not upload results or qualify teams to any other event. If an event cannot meet the criteria for Tournaments and Leagues, those events will be run as scrimmages.
- **Skills-Only Events** are listed as either Tournaments or Leagues but do not have any Qualifying Matches, Elimination Matches or Finals Matches. These events may or may not include judging.
- **Tournaments** are events that have Qualification and Elimination Matches for VRC and VEX U and Qualification and Finals Matches for VIQC. Tournaments may or may not have judging.

EVENT CRITERIA

For events (Tournaments, Leagues and Skills-Only) to be official and have results posted on RobotEvents.com, they must meet the following criteria:

Registration

The following registration requirements must be met for events to be official.

1. Events must be listed as either a Tournament or a League with online registration hosted on RobotEvents.com.
   Note: Skills-Only events are listed as Tournaments but must have "Skills-Only" in the name of the event.
2. Teams registered for the event must be registered and paid on RobotEvents.com for the current season.
3. VIQC and VRC Events must have at least 12 registered teams. League sessions may have less than 12 teams participating if the League has the required 12 registered teams. VEX U Events must have at least 6 registered teams.
4. Championship events have no team minimum. Championship event capacity is determined by the RSM in consultation with Event Partners in the Event Region.
5. Finalized Tournament Manager results (Tournaments and League Finals Sessions) must be uploaded within 48 hours of event completion.
6. Team payments for the event must be completed before the event date. If teams pay the Event Partner directly or make trades for fields or volunteers in exchange for the event registration fees, the EP should mark the team Paid on RobotEvents.com. The Event Partner is not required to accept direct payments and can require all teams to pay through RobotEvents.com.
7. If a Tournament has fewer than 6 organizations registered, no organization may have more than 33% of the total number of registered teams. Organizations are defined by the location of the hosting school or group. Having multiple team numbers or listing different names when a group meets together does not constitute a separate organization. However, each school in a district is recognized as a different organization and should have their own set of team numbers.
   Note: This criterion does not apply to Leagues or Skills Only Events.
8. Event Partners are permitted to host one (1) Tournament without organizational or team percentage registration restrictions given that they host another equal sized or greater Tournament the same season in the same program (VRC/VIQC) following all registration restrictions.
   Note: These Tournaments are generally referred to as Invitationals. This criterion does not apply to Leagues or Skills Only Events. All Leagues and Skills Only Events can be Invitational.
9. Events that offer the Excellence Award must offer the Robot Skills Challenge.

Dates and Deadlines

Official events must abide by the following dates and deadlines:

1. Held between **June 1, 2020**, and two (2) weeks prior to the Event Region's championship event for which they will qualify.
2. **Posting Deadline:** Official events must be posted on RobotEvents.com by **November 1, 2020** and be open for registration at least eight (8) weeks in advance of the event.
3. All Championship events within the United States must be held no later than **March 14, 2021**.
4. All Championship events outside of the United States must be held no later than **March 7, 2021**.

Rules and Guidelines

Official events must follow the rules and guidelines in these documents and manuals:

1. Game Manual including Inspection and Event guidelines.
2. Judge Guide and judging rubrics.
3. Referee Guide
4. Commitment to Event Excellence

Note: Events that offer the Excellence Award must offer the Design Award.

EVENT REGION'S CHAMPIONSHIP QUALIFICATION

There are three ways for teams to qualify to Championship events:

1. **Qualifying Award:** Winning a qualifying award at an official event in the team's Event Region.
2. **Robot Skills Ranking:** If the Championship event in the team's region is not filled to capacity through qualifying awards, teams may qualify through the World Skills Standings sorted for the Event Region and by grade level. Teams invited through Robot Skills Challenge Rankings are invited in ranked order after the results of the last qualifying event in the region have been posted. Scores earned after this date will not be used to qualify teams to their Championship.
3. **Wait List:** If there is remaining capacity due to teams not accepting the invite after the Robot Skills Rankings invites have been issued, the capacity will either be lowered and the event will be closed or teams will be invited from the wait list. This will be decided by the RSM.

Events that qualify teams to the Event Region's Championship

Official Events can become Qualifying Events and are allocated Event Region's Championship spots if they follow the following criteria:

1. The Spot Level of an event is the number of qualifying spots an event has been allocated to qualify teams to the Championship. This Spot Level is dependent on the capacity of the Championship, the number of events leading up to Championship, and the size of the qualifying event. The RSM will determine how many spots each event is given to fill the Championship event, categorizing events as Large, Medium and Small.
   a. Some Event Regions may have a minimum registration size to be made a qualifying event. If an event is official, but not at the qualifying event size minimum, then the Robot Skills Scores will be posted, but all other awards will not qualify teams directly to the Championship.
   b. Large events may be allocated more spots than smaller events. Events of the same size within the Event Region should expect to have the same number of spots.
   c. Leagues may have more spots than equal sized Tournaments within the Event Region due to the higher number of Qualifying Matches and longer duration teams experience with Leagues compared to Tournaments.
   d. Leagues with fewer than six (6) organizations registered may have fewer qualification spots than Tournaments of equal size in order to balance the opportunity for teams in the Event Region to qualify for the Championship event.
2. Once the Spot Level is determined for each event, the qualifying awards are based on the below charts with either one (1) or two (2) Excellence Awards being given.
3. Events that offer the Excellence Award will give one (1) Excellence Award when there is only one (1) grade level registered to the event, OR when there are less than ten (10) teams from one grade level registered two (2) weeks prior to the event.
4. Events that offer the Excellence Award will give two (2) Excellence Awards when the event is a blended event with at least ten (10) teams from each grade level registered two (2) weeks prior to the event. Only one Excellence Award may be given to a single grade level at the event.
5. If there is a team competing at the event that is from outside of that Event Region and wins an award that would have won a spot, or a team that double qualifies from the event (not from previous events or other methods), that spot will go to the next highest unqualified team on the Robot Skills ranking at that event. There is no look-back to previous events to see if a team has previously qualified. These spots will be filled by the RSM.
6. Teams that compete outside of their region will not be eligible for spots. However, their Robot Skills scores will be recorded as an official score.
7. If a Tournament does not offer judging only the two (2) Teamwork Champions will qualify to the Championship event. In some regions, the Robot Skills Champion will also qualify as determined by the RSM.
8. Spot levels follow the order of priority found in the tables below.
   Note: Skills Only Events with Judging may use the Robot Skills Champion and judged awards following the same hierarchy in the table without Teamwork and Tournament winners included. The RSM would determine the number of spots each Skills Only Event is allocated.

VEX IQ Challenge

Spot Level	Excellence Award *	Teamwork Champion	Design Award	Robot Skills Champion	TW 2nd Place	Innovate, Think, Amaze**	TW 3rd Place	Build, Create***	TW 4th Place	TW 5th Place
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	-	-	-	-	-
8-10 Spots	1	2	1	1	2	1,2,3	-	-	-	-
11 Spots	1	2	1	1	2	2	2	-	-	-
12 Spots	1	2	1	1	2	3	2	-	-	-
13-14 Spots	1	2	1	1	2	3	2	1, 2	-	-
15 Spots	1	2	1	1	2	3	2	1	2	-
16 Spots	1	2	1	1	2	3	2	2	2	-
17 Spots	1	2	1	1	2	3	2	1	2	2
18 Spots	1	2	1	1	2	3	2	2	2	2

* If the Event is giving 2 Excellence Awards, simply add 1 to the Spot Level for the additional Excellence Award, in which case there would be a Middle School Excellence Award and Elementary School Excellence Award given.

** Priority is given to Awards listed in order starting with Innovate and ending with Amaze.

** Priority is given to Awards listed in order starting with Build and ending with Create.

VEX Robotics Competition and VEX U

Spot Level	Excellence Award	Tournament Champions	Design Award	Robot Skills Champion	Tournament Finalists	Innovate, Think, Amaze, Build, Create**	Semi Finalist
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	-	-
8-12 Spots	1	2	1	1	2	1,2,3,4,5	-
13 Spots	1	2	1	1	2	2	4
14 Spots	1	2	1	1	2	3	4
15 Spots	1	2	1	1	2	4	4
16 Spots	1	2	1	1	2	5	4

* If the Event is giving 2 Excellence Awards, simply add 1 to the Spot Level for the additional Excellence Award, in which case there would be a Middle School Excellence Award and High School Excellence Award given.

** Priority is given to Awards listed in order, starting with Innovate and ending with Create.

Team Registration and Deadlines to the Event Region's Championship.

1. Teams are permitted to register for only one (1) Championship event in their Event Region leading up to the World Championship.
   Note: This does not include Signature Events.
2. Teams are not permitted to register for any Event Region's Championship outside of their Event Region.
3. Teams that qualify for the Championship event, on or before, **January 31, 2021**, will have two weeks to register and pay by credit card, check or PO for the Championship event.
4. Teams that qualify on or after **February 1, 2021**, (or qualified for a Championship event that is less than three weeks away) will have one week to register and pay by credit card, check or PO for the Championship event.

VEX WORLDS QUALIFICATION

This section describes how teams will qualify to VEX Worlds.

Once a spot is awarded to a team who has not yet qualified, that spot has been exhausted. If that team qualifies again, they do not take an additional spot and that spot will need to be re-issued as described in the sections below.

Spots to VEX Worlds 2021 from VEX Worlds 2019

These spots have already been won and teams will be invited to register to VEX Worlds 2021 when the VEX World registration page opens on RobotEvents.com

1. **All Excellence Award winners –** The VEX Worlds 2019 award winner from each grade level.
2. **All Teamwork Champions –** The two (2) teams on each winning alliance from each grade level from the VEX IQ Challenge at VEX Worlds 2019.
3. **All Tournament Champions –** The two (2) teams on each winning alliance from each grade level from the VEX Robotics Competition, and the single winning team from VEX U at VEX Worlds 2019.
4. **All Robot Skills Champions –** The first-place team from each grade level at VEX Worlds 2019.

Spots to VEX Worlds from Event Regions

The Spot Level chart found in the above section is used to show which awards at a Championship event will qualify for the 2021 VEX Robotics World Championship based on how many spots the region has been allocated. VEX Worlds spots are allocated to an Event Region based on the following:

1. At least one team from that Event Region must register and pay on RobotEvents.com by **January 1, 2021** for that Event Region to receive a spot.
2. The number of spots that each Event Region receives is based on the number of registered and paid teams in that Event Region from the previous season.
3. On **January 15, 2021**, additional spots will be allocated to Event Regions that have higher-than-average growth to re-balance spot levels due to these additional teams. Teams added after **January 1, 2021**, will not be considered in this re-balancing allocation of spots.
4. World Championship spots are calculated by program and grade level separately and allocated separately, i.e. the number of VRC middle school teams has no influence on the number of spots that Event Region would get for VIQC elementary school.
5. Event Regions that have only one assigned VIQC Elementary School World Championship spot should give that qualifying spot to the Elementary School Excellence Award winning team at a blended VIQC Championship event in that Event Region.
6. Event Regions that have only one assigned VRC Middle School World Championship spot should give that qualifying spot to the Middle School Excellence Award winning team at a blended VRC Championship event in that Event Region.

7. Regions that have more than one assigned VIQC Elementary School World Championship spot should make every attempt to hold a separate grade level VIQC Championship event. If the only option is to host a blended event, the elementary school spots can only go to elementary school teams. The middle school spots can be won by middle school or elementary school teams. Likewise, regions that have more than one assigned VRC Middle School World Championship spot should make every attempt to hold a separate grade level VRC Championship event. If the only option is to host a blended event, the middle school spots can only go to middle school teams. The high school spots can be won by high school or middle school teams.
    a. For blended events, the lower grade level's spots will be protected by not assigning the spots to awards that could be won by the upper grade level teams. This is done by using the upper grade level's spot level plus a second Excellence Award.
    b. The balance of remaining spots will be awarded as described below.
8. The Event Region's spots will not count as being awarded if the following is to occur.
    a. Spots are protected in a blended event as described above.
    b. Spots are unable to be given at the Event Region's Championship(s).
    c. Any spot that would go to a team who is already qualified to VEX Worlds prior to winning this spot, e.g. a spot that would go to a team who has already qualified to VEX Worlds, or a team who wins multiple spots at the Championship.
9. Event Region's spots that have not been awarded are not lost. These remaining spots will be awarded using the following process.
    a. The RSM will assess how many spots are remaining in each program and grade level after the conclusion of the Event Region's Championship(s).
    b. The World Robot Skills Standings will be sorted by Event Region, program and grade level once the last Championship event has uploaded Skills results to RobotEvents.com.
        Note: No scores earned after the last Championship event will be considered.
    c. The highest, non-qualified team(s) on the World Robot Skills Standings, after being sorted in part b, will qualify to VEX Worlds until all remaining spots have been awarded.
    d. Steps b and c are repeated for all programs and grade levels that have remaining spots until all spots have been awarded.

Note: Please contact your RSM for additional information regarding qualifying events, qualifying spots, growth considerations, and any other questions.

Spots to VEX Worlds from Signature Events

Signature Events are highly produced events that give teams an opportunity to compete with other teams from different regions and abilities. These events can be found on RobotEvents.com using the **Level Class** filter for Signature Events. Not all Signature Events qualify teams to VEX Worlds, due to some being after the qualification deadline.

1. Signature Event spots to the VEX World Championship do not come from any region and are counted separately, i.e. Spots given to Signature Events do not decrease the number of spots that Event Region is allocated. These spots are in addition to the Event Region's allocation of spots.
2. Spots are allocated to Signature Events based on multiple factors. Teams should look at the Awards tab on the event listing on RobotEvents.com to see how many spots each Signature Event has been allocated.
3. If the team that wins a spot at a Signature Event is already qualified, or wins multiple spots at the Signature Event, those spots will be filled by the team(s) with the highest Robot Skills score at that Signature Event at the end of the event.

Team Registration and Deadlines to VEX Worlds

1. If a team wins a spot to VEX Worlds and cannot attend.
   a. The team MAY NOT transfer that spot to another team of their choosing.
   b. In regions outside of the United States, the spot will go to another team from that region based on the criteria set forth by that region, typically the team with the highest Robot Skills score from that region.
   c. In the United States, the spot level has already been inflated to account for the teams that win spots but cannot attend and therefore not awarded to another team.
2. If there is remaining capacity after all spots have been awarded, the capacity will be filled from the Wait List, based on a number of various factors such as, but not limited to design, performance, location and representation.
   Note: The capacity shown on Robot Events for VEX Worlds is not the actual capacity of the event and may be increased or decrease by the discretion of the REC Foundation as VEX Worlds approaches.
3. Teams that have qualified from VEX Worlds 2019 and the 2019-2020 season of Online Challenges will have eight (8) weeks to register and pay from when they are invited. This will be sometime in September or October.
4. Teams that qualify on or before **February 1, 2021**, must be registered and paid by **March 15, 2021**.
5. Teams that qualify after **February 1, 2021** but before **March 1, 2021**, will have four (4) weeks to register. Teams must have their registrations paid by **March 29, 2021**.
6. Teams that qualify on or after **March 1, 2021**, will have two (2) weeks to register. Teams must have their registrations paid by **March 29, 2021**.

Note: Payments can be made by credit card, check or PO. Checks and PO's must be received by the deadline**.**