



20  22

**REC FOUNDATION**  
**— COACH —**  
**SUMMIT**

THE QUALIFICATION PROCESS  
Meredith Hale & Emily Bruning



**Meredith Hale**  
Team Engagement Manager  
Nevada & Southern California

Has more than 20 years of experience working with teachers, programming, and curriculum through museum education, libraries, and schools

Really loves to help people - ask me anytime!

Is a lifelong maker, artist, tinkerer, and dog person

Likes coding, but LOVES building

Volunteer Preference: Emcee!

 [meredith\\_hale@roboticseducation.org](mailto:meredith_hale@roboticseducation.org)



**Emily Bruning**  
Team Engagement Manager  
Indiana, Ohio, & West Virginia

Has more than 12 years of experience in the field of education as a classroom teacher and State Department of Education Specialist

Prior VIQC coach and event partner

Loves building, iterating, designing, and perfecting the engineering notebook

Loves baking, hiking, and parenting

Volunteer Preference: Queuing

 [emily\\_bruning@roboticseducation.org](mailto:emily_bruning@roboticseducation.org)



# END GAME

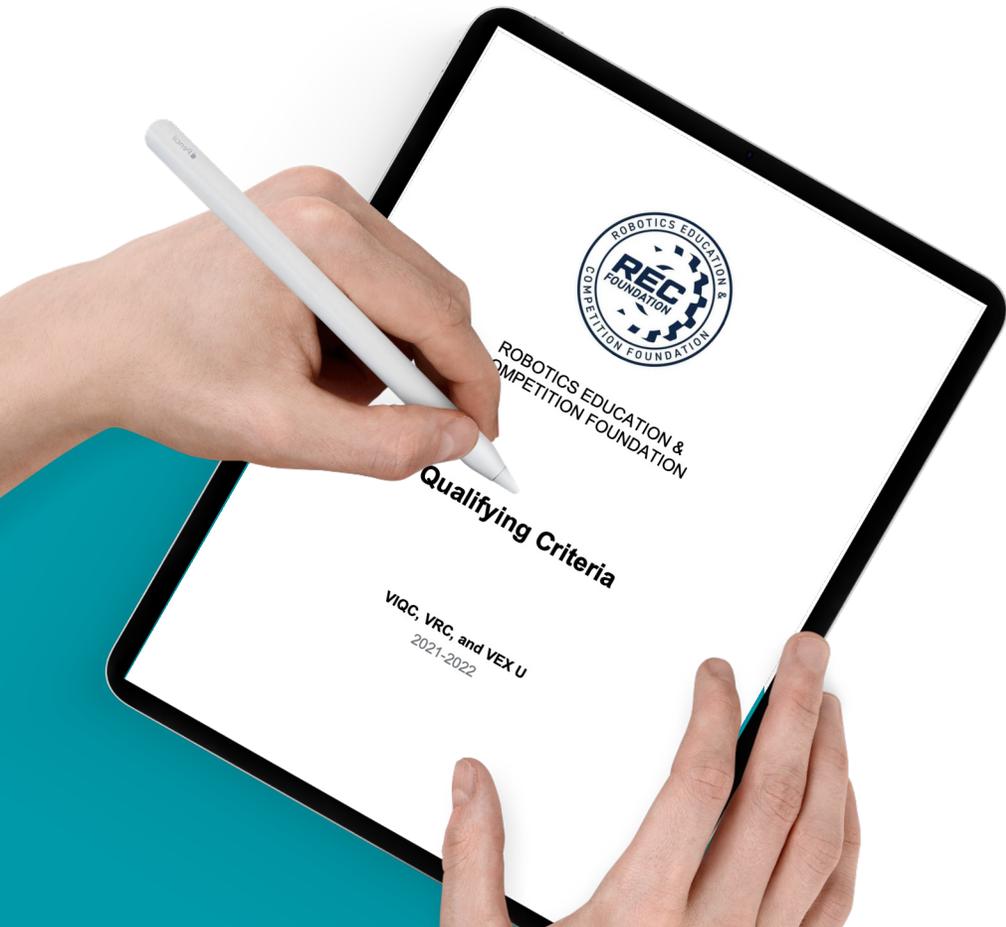
## ROBOTICS WORLD CHAMPIONSHIPS

There are some who would tell you that the main goal to the season is getting to the Robotics World Championships. I think we all know the real goal is to get students excited and learning about STEM (often without even realizing it). However, this session is about the qualification process, so **HOW DO YOU GET TO THE ROBOTICS WORLD CHAMPIONSHIPS?**

- ✓ **Compete in local tournaments, qualify for your regional championship, and win a qualifying award there.**
- ✓ **Win one of the Online Challenges that offers a spot to Worlds.**
- ✓ **Win a qualifying award at a Signature Event.**

# QUALIFYING CRITERIA

- ✓ Bottom line for all questions and answers about qualification
- ✓ Published annually
- ✓ Changelog at the top of document
- ✓ Defines event types & event criteria
- ✓ Defines Regional Championship Qualifying Criteria
- ✓ Defines World Championship Qualifying Criteria
- ✓ Lists World Championship Spot Allocations per region





### **Tournaments**

Typical 1-day competitions, usually on a weekend, usually has qualification awards, skills matches, and judging.



### **Leagues**

Ranking sessions over several days leading to a Finals Session, League Champions & qualification for Regional Championships.



### **Skills-Only Events**

These are just for skills matches. There is no qualifying for Regional Championships, but a chance to add to World Skills Rankings.



### **Signature Events**

Large events at a special venue, like a smaller version of Worlds. Top award winners can earn a spot to Worlds.



### **Championships**

Regional Championships are culminating events for event regions, where award winners earn spots to the World Championships.

# TYPES OF EVENTS

**Not every event leads to qualification to a Regional or World Championship event directly.**



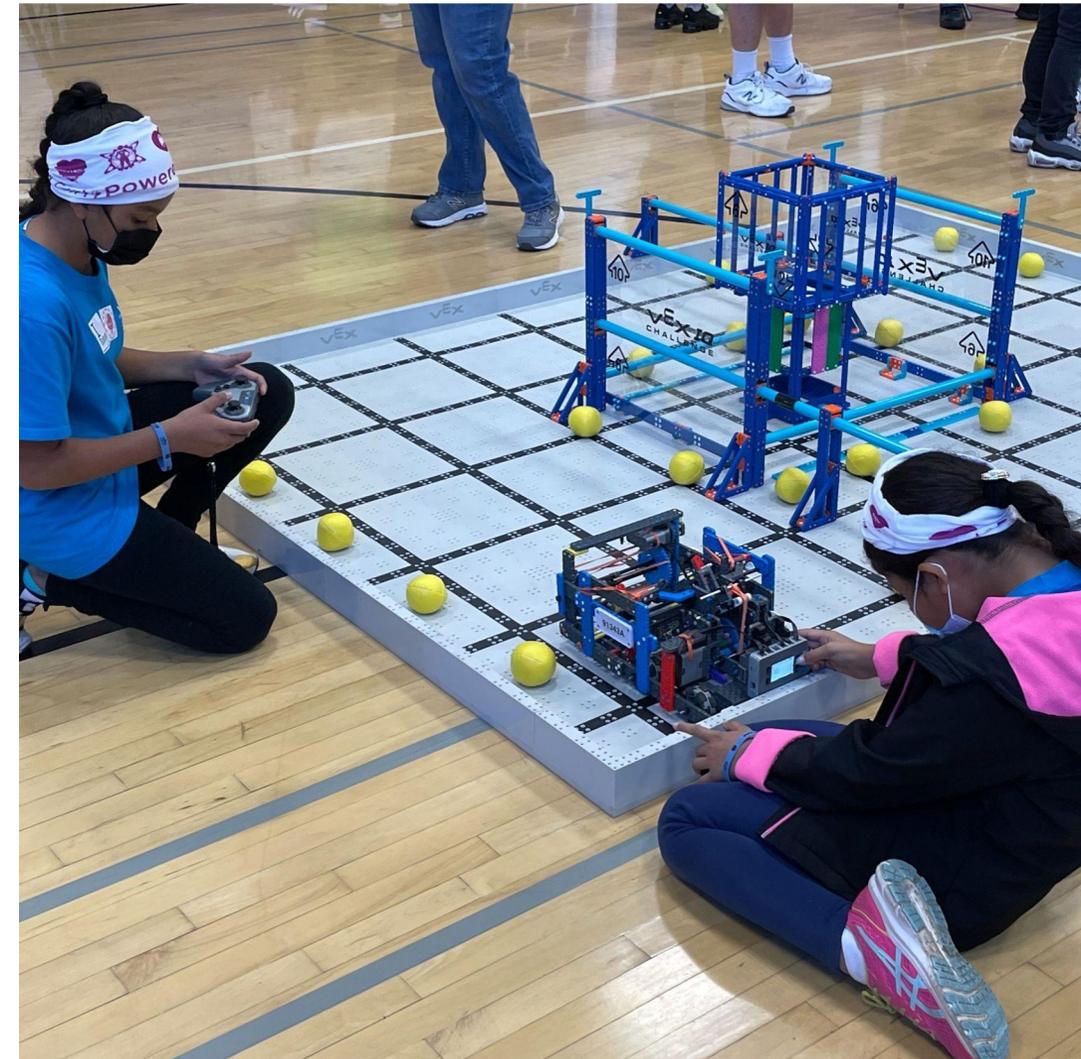
# EVENT REGIONS

- ✓ Teams are assigned an event region based on **geography** and **team density**. In the United States it's often by state, but larger states with a lot of teams might have more than one event region. For example, Texas has 4 event regions.
- ✓ Some countries are their own event regions around the world.
- ✓ Teams **compete within their own event regions** to qualify for their **Regional Championship** to then qualify for the World Championship.
- ✓ **Each event region** has a number of **spots to Worlds allotted**, depending on the number of registered teams in that region.
- ✓ Teams can attend tournaments outside of their event region, but they will not qualify for anything at that event. They can, however, earn points for the World Skills Ranking outside their own event region.
- ✓ **Signature Events** are outside the regular event region rules. Attending teams **can qualify for Worlds**, no matter their home even region, and awards given do not take from the allotted spots in that event region.

# TOURNAMENTS

- ✓ 16-team minimum
- ✓ Qualifying Matches & Elimination (VRC) or Final (VIQC) Matches
- ✓ Skills Matches
- ✓ Engineering Design Notebook Judging & Interviews
- ✓ Awards given determined by EP
- ✓ Which awards qualify depend on the number of regional championship spots available. (If no Judging, only Teamwork/Tournament Champions.)

Spot Level	Excellence Award *	Teamwork Champion	Design Award	Robot Skills Champion	TW 2 <sup>nd</sup> Place	Innovate, Think, Amaze**	TW 3 <sup>rd</sup> Place	Build, Create***	TW 4 <sup>th</sup> Place	TW 5 <sup>th</sup> 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	-	-	-





# LEAGUES

- ✓ Provides multiple opportunities for the same group of teams to compete.
- ✓ 3 or more Ranking Sessions of a few hours each (qualification matches & possibly skills matches), a few weeks apart.
- ✓ One Final Session (usually with Judging included).
- ✓ Awards given determined by EP, awarded at the Final Session
- ✓ Which awards qualify depend on the number of regional championship spots available. (If no Judging, only Teamwork/League Champions.)



# WORLD SKILLS STANDINGS

Most events will offer Skills Matches - a chance for a team to play the game against the clock in front of a referee to see how many points they can score, both driving the robot, and in an autonomous programming match. These points continue to accumulate through the season to show where the team is ranked in the world. **HOW DOES THIS AFFECT QUALIFICATIONS?**

## TEAMS CANNOT QUALIFY MORE THAN ONCE!

If there are spots open for Regional and World Championships, the **best-ranked teams in the region** will be invited to fill those spots.

Rank	Score	Programming Skills	Driver Skills	Highest Programming Skills	Highest Driver Skills	Highest Programming Score Timestamp	Highest Driver Score Timestamp	Highest Programming Score Stop Time	Highest Driver Score Stop Time	Team Number	Team Name	Organization	Event Region	Country
1	713	327	386	327	386	2022-02-11 10:04:35	2022-02-11 10:24:31	3	1	8059A	Blank.	Anglo-Chinese School (Independent)	Singapore	Singapore
2	707	327	380	327	380	2022-02-26 02:42:47	2022-02-26 12:20:04	2	1	323V	GEARS	Cornerstone Robotics	Indiana	United States

# REGIONAL CHAMPIONSHIPS

- ✓ Number of Spots for Regional Championships determined by EEM (based on things like event region density, event size, probable double qualifications).
  - Teams qualify for Regionals by winning awards at tournaments & leagues
  - If there are open spots due to double qualifications, teams are invited from the World Skills Standings.
- ✓ Qualifying Matches & Elimination (VRC) or Final (VIQC) Matches
- ✓ Skills Matches
- ✓ Engineering Design Notebook Judging & Interviews
- ✓ Worlds-qualifying Awards determined by number of Worlds Spots allocated
- ✓ Worlds-qualifying spots determined by REC Foundation leadership based on World Championship Capacity & number of registered teams in that Event Region.





# SIGNATURE EVENTS

- ✓ World-Class event, often at a special location
- ✓ EPs must apply and be accepted to host a Signature Event
- ✓ Level 1 Signature Event (at least 24 teams)
  - 1 Worlds Spot to Excellence Award Winner
  - Excellence Award, Design Award, Robot Skills Award, & Judges Award
- ✓ Level 2 Event (at least 40 teams)
  - 3 Worlds Spots to Excellence Award Winner & 2 Teamwork/Tournament Champions
  - Excellence Award, Design Award, Think Award, Amaze Award, Build Award, Create Award, Robot Skills Award, & Judges Award.
  - 2-day event with 3 qualifying matches per day



# ONLINE CHALLENGES

LEARNING BEYOND THE COMPETITION FIELD

Students engage in activities ranging from video production, to web design, creative writing, and CAD engineering. Participants show off their work, win prizes or even qualify for the VEX Robotics World Championship.

# WORLD SPOT ALLOCATIONS

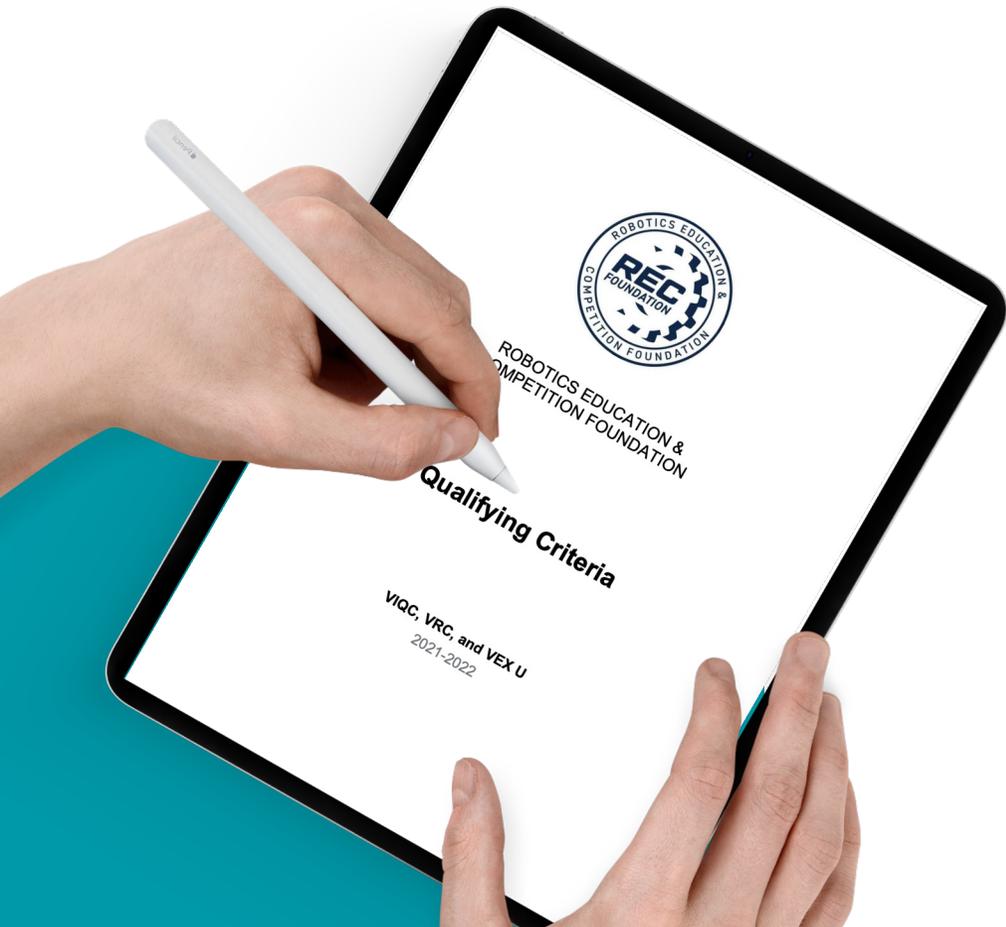
Worlds spot allocations are determined based on the percentage of registered teams in an Event Region as it compares to the total number of teams registered in the world. This number is published in the Qualifying Criteria and may change closer to the event if an Event Region cannot send representative teams. There are different numbers for each program and grade level in every Event Region.

## VIQC Spot Allocations

Event Region	VIQC Elementary	VIQC Middle School	Event Region	VIQC Elementary	VIQC Middle School
Andorra	1	1	United States - Alabama	21	29
Australia	10	15	United States - Arizona	9	13
Canada - British Columbia (BC)	4	3	United States - Arkansas	8	16
Canada - Ontario/Quebec	4	8	United States - California - North	8	14
China	100	48	United States - California - South	25	23
Colombia	3	6	United States - Colorado	12	9

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**THANK YOU**

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**BREAK TIME**