

FIRST[®] 2024 CHAMPIONSHIP

PRESENTED BY

BAE SYSTEMS

FIRST[®] LEGO[®] LEAGUE CHALLENGE ADDENDUM

Updated April 3, 2024

LIGHTS. CAMERA. STEAM!

FIRST. IN **SHOW.**

PRESENTED BY **Qualcomm**

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About *FIRST*® LEGO® League Challenge

Overview

Teams of students ages 9-16 engage in research, problem-solving, coding and engineering – building and programming a LEGO® robot that navigates the missions of the MASTERPIECESM Robot Game. 160 teams will present their findings at the *FIRST* LEGO League Challenge World Festival located in **the Level 3 Ballroom**.

MASTERPIECESM Challenge

In the 2023-2024 MASTERPIECESM challenge, *FIRST*® LEGO® League students will imagine and innovate new ways to create and communicate art across the globe.

Awards and Ceremonies

Date: Saturday, April 20, 1:00 pm – 4:00 pm

Location: General Assembly, Level 3

We encourage all teams to attend the Awards Ceremony – trophies will be presented, and we’ll celebrate teams’ accomplishments from the event. During the ceremony, teams will get a sneak peek at the upcoming season!

Coaches' Meeting

Date: Wednesday, April 17, 2:30 pm – 3:30 pm

Location: General Assembly, Level 3

Make sure that at least one of your team's coaches is on-site and available to attend the Coaches' Meeting. This is your opportunity to hear about important procedures and timelines, and it gives you the opportunity to ask questions. Don't miss this important meeting!

Encore Performances

Date: Saturday, April 20, 7:00 am – 11:00 am

Location: General Assembly, Level 3

The Encore is a celebration for all teams on Saturday, April 20. Each team will be assigned two Alliance Partners and together, will play a robot game that will be released at 7:30 am (doors open at 7:00 am). Bring your robots, computers, extra parts, and join us for lots of fun! This is for bragging rights only - game on, everyone!

To participate in the encore, please complete this form by Friday, April 5 at 12:00 pm ET: [2024 FIRST LEGO League World Festival Encore Registration Form](#). Unfortunately, NO exceptions can be made after this date.

Family Engagement Zone

Date: Thursday, April 18- Friday, April 19

Location: Pre-Function Area, Level 3

Participate in LEGO mural making, Six Bricks games, building challenges, and more! Adult supervision required.

Judging

The team judging structure at the *FIRST* LEGO League Challenge competition happening at the *FIRST* Championship will vary from the judging process your team experienced throughout the season. During the event, your team will attend an **Innovation Project** judging session in a judging room and receive judges in the pits for **Robot Design** judging, both at scheduled times. **Core Values** will be observed during both sessions and teams may be asked Core Values questions by both sets of judges.

Judging Requirements:

- Presentations must be in English, and they must be live presentations. Fully pre-recorded video presentations are not permitted.
- Translators are welcomed and encouraged for teams that do not speak English to communicate with the judges during the question-and-answer portion of each Judging session.

- All team materials that are brought into the judging room should be taken by the team when they leave. The team can refer to items as visual aids during their presentations, but judges will not have time to look at any materials after the team leaves.

Judging Room Setup:

- Projectors and screens **will not be** provided in judging rooms. You will be required to provide all support equipment if you need to display a presentation (i.e., a PowerPoint Presentation). A power source **will not** be provided, so plan accordingly.
- The Judging room will have a few chairs – otherwise, the space will be open. A small table will be provided for team use. A small number of chairs are available for up to 4 spectators. In addition to the team, 2 adult coaches, up to 4 spectators, and 1 translator are permitted in the judging session. If chairs are needed for your presentation, please take them from the spectator area.
- The judges will be seated facing the entrance at a table with a device to record and submit rubric scores. Teams and accompanying spectators should **not** walk behind the judging table for any reason.
- Multiple teams will be judged in the same general area, so we ask that teams modify any presentation style that might interfere with Judging sessions in your area. For instance, singing loudly or playing musical instruments can interfere with other teams and their presentations. We ask that you make quieter presentation choices.

Judging Session Flow:

The team will see judges in a room for their Innovation Project presentation. Teams should plan to give their 5-minute Innovation Project presentation. This will be followed by 5 minutes of Q & A about the Innovation Project and then up to 5 minutes of Core Values Q & A.

Judges will visit the team in their pit area for Robot Design judging. Teams should plan to present their robot, robot attachments, planning documents, and code to the judges. Teams may share with the judges any equipment and documentation to help them complete the rubric. Judges will ask the team follow up questions and will ask Core Values questions. Robot Design judges will observe at least one of the team's official robot game matches.

Awards:

The *FIRST* LEGO League Awards structure will be used at World Festival, including all official Optional Awards. There will be three special awards at World Festival: Gracious Professionalism Award (teams will be nominated by the referees), Coopertition Award (teams will be nominated by Pit Admin, Pit Volunteers, and Practice Table Volunteers), and the Peer Award (teams will nominate each other).

The Champion's Award will be determined by equally weighting team ranks in the three judging areas (Core Values, Project, Robot Design) AND Robot Game, at 25% each. *Gracious Professionalism*[®] scores from each of the Robot Game matches will feed into the Core Values rank.

Peer Award and Coach/Mentor nomination forms will be available at Pit Administration and should be returned by noon ET Friday for consideration. Teams should submit a maximum of ONE Peer Award and ONE Coach/Mentor Award nomination.

LEGO® Mural Building Activity

Date: Wednesday, April 17 – Friday, April 19

Location: Pre-Function Area, Level 3

Join us for a fun, collaborative build as we put together a large LEGO® mural to celebrate the MASTERPIECE season and get ready to reveal our next Challenge! The activity will be located outside of the *FIRST* LEGO League Explore and *FIRST* LEGO League event spaces and will mirror Challenge Pit Hours Wednesday-Friday. Adult supervision required.

Load-in/Set up

Date: Wednesday, April 17, 11:00 am – 4:00 pm

Location: Grand Ballroom, Level 3

Teams will be asked to load-in and set up their team pit space. The pit is where your team will spend most of its time. It is the area where you can showcase your team, relax between your scheduled events, practice with your robot, and most importantly, get to know other *FIRST* LEGO League teams from all over the world!

Your team will be assigned to an 8 feet x 8 feet (2.4 meters x 2.4 meters) space which will be your home at the World Festival. Each space will have one standard-sized table and two chairs. Short pipe and drape will frame the space on three sides, but any decorations you bring must be supported with a structure you bring or create. You may decorate it in a way to showcase your country, state, your Innovation Project, and/or your unique and fun team identity. We encourage you to be creative, but please consider the following limitations and restrictions:

- Decorate within your pit space. Also, consider 10 feet (3 meters) as a height limit as well. For safety reasons, your decorations must remain within this space.
- You will have access to 1, 120-volt electrical outlet. We encourage you to bring an extension cord and a power strip for you to plug in multiple devices simultaneously.
- Please do NOT bring or use helium balloons or open flames. No team should cook or prepare food in the pit area.

Load-out

Date: Friday, April 19, 3:00 pm – 4:30 pm

Location: Grand Ballroom, Level 3

We ask that teams load-out and remove all items from their Pit by 4:30 pm on Friday.

Practice Rounds

Practice Tables:

- There are several practice tables set up near the Pits in the Ballroom for optional use by teams on Thursday & Friday.

- Teams can choose to utilize these practice tables by "signing up" for time slots at the nearby desk on a first come, first served basis.
- Practice tables are monitored only for time; teams are expected to keep the tables and mission models in proper shape.
- Laptops/tablets/cables are allowed in the practice table area.

Practice Matches:

- There are 3 scheduled practice matches on Thursday for each team. While not required for score ranking, every team is highly encouraged to attend each of their practice matches.
- These dress rehearsal practice matches are held on the actual competition tables. Matches are queued, inspected, timed, and scored by referees – just like the full competition will occur on Friday.
- At the end of the day, scores from practice matches are reset.

Queuing

Fifteen (15) minutes before their scheduled match, teams will “check-in” at the match check-in station in the Ballroom, located at the end of the Pits.

- Teams should not proceed directly to the General Assembly room.
- It's important for the entire team to be present at the Ballroom check-in station by the Arrival Time. Teams will wait in the designated queuing area until escorted over in a group to the competition floor in the General Assembly room.
- Teams who are not present at the Ballroom queue station when the group leaves for their match, will likely forfeit that match.
- Team "buttons". Each team member, each coach, and each match spectator - must be wearing a round Team Button to enter the queue and have access to the competition floor. All others wishing to observe the matches must do so via the main seating in the General Assembly room.

Robot Game

Inspection and Set Up:

When a team arrives at the table, they should immediately start setting up for the inspection (teams will have 1 minute to get their equipment ready for inspection). Once the inspection is complete, they will have 1-2 minutes to prepare the robot to run (rule Before the Match: Match Set Up 3). Teams should practice setting up for inspection and preparing to run after the inspection. Due to the limited time in the schedule, matches may start before a team is ready if they exceed these time limits.

Setup and Scoring:

- Teams will have up to two (2) minutes to prepare for the Equipment Inspection. NOTE: If a team takes too much time to set up, the match may begin before the team is ready. Your team should practice setup at home, so your team is prepared to begin your match on time.

- Two team members and one translator, if required, should review the team's score with the referee and then move off the fields promptly to allow the table to be reset in time for the next team. Your team should decide which team members will review the score sheet prior to the start of the match.

- A reminder that all mission models and team equipment must remain at the competition table during the match. Team members are not permitted to store items off of the table and team members in the team area are not permitted to be holding mission models or team equipment (per Before the Match - Match Setup). Team equipment cannot be stored on the floor at any time.

Storage and Team Area on field:

- World Festival has specific requirements for where teams may locate their people and equipment during matches. These requirements are for safety and fairness because of the size of the World Festival, the number of teams competing, and since teams are traveling from all over the world.

- Team Area: Each field will have a team area marked on the floor that will be at least 66 sq. feet/6 sq. meters. Except for the team technicians, all team members, coaches, and spectators must stay within the team area while at the field. In addition, there will be a space marked near the end of the field opposite Base for a team photographer.

- We recommend that you bring a container or small cart to carry your robot and team equipment. Once you arrive at the table you should unpack all necessary items from the container/cart and put them on the table. The container/cart should then be stored in your team area and cannot be used by the team during the match.

Robot Game Clarifications:

Review the MASTERPIECE Updates and Clarifications [here](#).

New! Updates for teams from the Head Referees:

The referees are excited to meet you all at the upcoming *FIRST* LEGO League World Festival at the *FIRST* Championship, and we're really looking forward to seeing all the interesting and innovative solutions you all have come up with.

There are a few things that we wanted to pass along to teams before you arrive so that you can be prepared. These are reminders and clarifications of information from the Robot Game Rulebook and the Challenge Updates.

Match Timing:

- Teams will have 1 minute to prepare for their equipment inspection and 2 minutes to set up after their inspection. If the team takes longer than this to be ready, there is a chance that the match may start before they are ready. Please make sure to practice the inspection and set up before arriving. With 160 teams we have to stay on time throughout the day
- Please make sure that your team is at the queuing area in the pits at least 15 minutes prior to the start of the match. The queuers will then direct you when to leave for the competition area.

Transporting and Storing Equipment:

- Teams may use small carts or boxes to transport their robot and equipment to the competition area but they cannot be used during the match
- Reminder that ALL team equipment and mission models must be stored in the two home areas or in the hands of the technicians at the table. Teams may not hand anything to the team members not at the table and nothing can be stored on the floor.

Game Specific Reminders and Updates:

- Based on Update 09, all combinations that include a mission model must be able to demonstrate the separation of the mission model (and return to original condition) in a single motion. Combinations will be treated on a per mission model basis
- Based on Update 08, teams attempting the Augmented Reality mission should be prepared to rotate the orange activation lever of the augmented reality statue mission model the full amount. If the activation level is not all the way rotated, the mission will not score.
- Experts must still be attached to their bases (in original condition) to score.
- Removing the rolling camera from the track constitutes mission model separation and will not score.
- For the rolling camera mission to score, the camera must be left of the left-most dark blue tile.
- In the event that a robot is interrupted completely outside of home, technicians may hand the robot from one side of the table to the other. The team still loses a precision token. This is an exception to “During the Match: Inside Home 3.”

Thank you for all your hard work, and we look forward to seeing you in Houston!

- Karen and Alan

FIRST LEGO League World Festival Head Referees

Practice Matches:

- There are three (3) scheduled practice matches on Thursday for each team. While not required for score ranking, every team is highly encouraged to attend each of their practice matches.
- These dress rehearsal practice matches are held on the actual competition tables. Matches are queued, inspected, timed, and scored by referees – just like the full competition will occur on Friday.
- At the end of the day, scores from practice matches are reset.

Schedule

Visit the *FIRST* Championship App, [website](#), or Pit Admin for a detailed schedule of events.

Team Check-in

Date: Wednesday, April 17, 11:00 am – 3:00 pm

Location: Grand Ballroom, Level 3

Teams will be able to print their badges at the registration desk on the first floor at the George R. Brown Center, or at the satellite badging station next to Pit Admin in the Grand Ballroom. The Main Contact listed on the registration should receive an email containing a bar code one week prior to the event. The Main Contact can scan the barcode in the email or search for their team-by-team number/name.

After receiving your team's badges, please proceed to the level 3 ballroom and head to the Pit Admin table to check-in your team and receive your assigned Pit Space and detailed information about the event. Please make sure that team members are always accompanied by an adult.

Your team will receive the following at check-in:

Team Buttons: You will receive 10 team buttons (1 for each team member). Additionally, you will receive 2 coach buttons, 2 spectator buttons, and if you are traveling with a translator, you'll receive 1 translator button. Team buttons must always be visible. Coaches have full access to team-only areas. Up to 2 spectators may join the team in judging (the coaches and spectators may not switch out and must stay with the team for all three judging sessions), and 2 spectators may join the team to access the team-only area of the robot competition. The team pit area is not restricted and is open to the public.

NOTE: At least one adult coach is required to always supervise the team during the event.

Schedule of Events: Your team will be provided with information about the overall event, including a competition schedule.

World Festival Team Number

Teams are assigned a special team number for the World Festival, which is different from the team number assigned in your country. The World Festival team number will be used throughout the event and on the event schedule.