



# 14 Event Rules (E)

FIRST is committed to Equity, Diversity, and Inclusion and as such, FIRST strives to make reasonable accommodations for persons with disabilities that request accommodation. If a participant needs an accommodation for an event, please talk to a volunteer at the event or contact your local leadership before the event so they can help ensure the accommodation is provided. Local leadership may make exceptions to event rules to allow for reasonable accommodations given the exceptions do not create an undue hardship or cause safety concerns.

Rules around safety and security within this section are minimum requirements, and Program Delivery Partners are able to implement increased restrictions due to local or venue requirements (e.g. requiring badging for all attendees, reserving seating for accessibility, etc.). Partners should communicate additional local requirements early enough to allow teams to plan.

Safety is always paramount, and many rules are intended to establish norms at each event that will mitigate injury risk to all participants.

Event staff have the final decision authority for all safety-related issues within a venue.

## 14.1 General Rules

The rules below apply throughout an event, i.e. from when Load-In begins to when Load-Out is complete.

Universal Violation Note: A violation of any Event Rule will result in a VERBAL WARNING. Egregious or subsequent violations will be addressed by the Head REFEREE, the Lead Robot INSPECTOR (LRI) and/or Event Management. Teams should note that egregious and frequent violations may be shared with the Judge Advisor which could lead to disqualification from awards.

Additional rule specific violations, if applicable, are listed with their corresponding rule.

- **E101** \*Personal safety comes first. All team members must observe the following safety practices throughout the event:
  - A. wear safety glasses (only ANSI-approved, UL Listed, CE EN166 rated, AS/NZS certified, or CSA rated non-shaded) while in and around the playing FIELD and in the pit area. Lightly tinted lenses are permitted provided eyes are clearly visible to others, but reflective lenses are prohibited. Accommodations will be made for participants that require tinted safety glasses. The only exception is for teams in their first 10 minutes of their load in and for the first 10 minutes pits are open each day of the event as long as they're not working on the ROBOT or setting up their pit.
  - B. wear closed toed/heeled shoes.
  - C. tie back long hair while working on or around a ROBOT or ROBOT related materials.
  - D. wear appropriate clothing.
  - E. walk in the venue.
  - F. health and safety requirements in place for that event (e.g. mask wearing).

For more information about safety at *FIRST* Robotics Competition events, please reference the <u>Safety Manual</u>.

**\*Be nice.** All participants must be gracious and professional at all times while attending *FIRST* Robotics Competition events. Uncivil behavior toward any participants is not tolerated.





Examples of inappropriate behavior include, but are not limited to

- A. use of offensive language or other uncivil conduct,
- B. intentionally blocking the view of other participants or spectators for an extended period (team members momentarily holding up team signs while directly supporting their team is not considered a violation of this rule.), and
- C. jamming or interfering with the remote sensing capabilities of a ROBOT or the FIELD while in open-access spectator seating areas.

Examples of remote sensing capabilities include, but are not limited to, vision systems, acoustic range finders, sonars, and infrared proximity sensors.

Use of imagery that, to a reasonably astute observer, mimics the AprilTags employed on the FIELD is a violation of this rule.

Examples of particularly contemptible behavior that may result in ejection from the event include, but are not limited to, the following:

- A. assault, e.g. throwing something that hits another person (even if unintended),
- B. threat, e.g. saying something like "if you don't reverse that call, I'll make you regret it,"
- C. harassment, e.g. badgering someone with no new information after a decision's been made or a question's been answered,
- D. bullying, e.g. using body or verbal language to cause another person to feel inadequate,
- E. insulting, e.g. telling someone they don't deserve to be on a team,
- F. swearing at another person (versus swearing under one's breath or at oneself), and
- G. yelling at another person(s) in anger or frustration.
- **E103** \*Children with adults, please. Children under 12 must be accompanied in the pits by an adult at all times.
- **E104** \*Respect the venue. Teams may not damage the venue, including but not limited to bleachers, floors, walls, railings, etc., in any way.
- **\*Teams must check in.** An adult team member must check in at the Pit Administration station no later than 90 minutes before Qualification MATCHES are scheduled to start.

Violation: Teams will be contacted in their pit. Failure to Check-In may result in a team not participating in the event.

Event check-in takes place at the Pit Administration station the evening before and/or the first morning of each event.

Once a team's consent and release forms are submitted at Pit Administration, each team will receive their DRIVE TEAM & Safety Captain buttons.

- **\*Some event resources for event teams only.** Only teams registered for an event may use that event's Competition FIELD, Practice Field, Spare Parts, Machine Shop, and Inspection. Host teams supplying Practice Field elements and/or Machine Shop resources may use them, however teams registered for that event must be granted priority.
- **\*Work in designated areas only.** At the event venue, teams may only produce FABRICATED ITEMS as follows:





- A. in their pit area,
- B. in another team's pit area with permission from that team,
- C. while queued for a MATCH or Practice Field (given space constraints, extra scrutiny regarding safety is required),
- D. any area designated by Event Staff (e.g. Playoff Pit Area, etc.), or
- E. as permitted at provided machine shops that are available to all teams.
- **E108** \*Some things don't belong at events. Do not bring or use the following:
  - A. skateboards
  - B. 'hoverboards'
  - C. drones
  - D. bottled gas tanks (e.g. helium)
  - E. noisy devices or noisemakers, such as floor stompers, whistles and/or air horns
  - F. walkie-talkies
  - G. scooters, except for those used for accommodations
- **\*Don't arrange for additional utilities.** Do not arrange for power, internet access, or phone lines from venue service providers or attempt to use venue internet connections reserved for event purposes (e.g. the FIELD Management System or web casting).
- **E110** \*Don't sell stuff. Teams may not conduct sales at an event. This includes, but is not limited to, raffle tickets, food, hats, shirts, candy, water, soft drinks, fruit, or any promotional products.
- **E111** \*Don't give out food. Teams may not distribute food to others at an event.
- **E112** \*Make FIRST loud, but with restrictions. Do not invite or bring live bands to play in the audience. Do not play loud music.
- **E113** \*Hang banners with care. Be respectful when hanging your banners.
  - A. Do not cover or move other team or sponsor signs already in place.
  - B. Share the available space fairly with other teams.
  - C. Do not obstruct the view of spectators.
  - D. Get permission from the Event Coordinator before hanging banners outside of your pit.
  - E. Hang signs and banners in a safe manner.
  - F. Banners hung outside team pits must not be larger than 25 ft.<sup>2</sup> (2.3 m<sup>2</sup>).

We encourage teams to bring team flags and/or signs for display in their pits and/or the playing FIELD area.

To find your Event Coordinator, inquire at the Pit Administration desk.

Respect venue-specific rules regarding sign location and hanging methods. At the end of the event, safely remove all signs and anything used to hang the signs (tape, string, etc.).

**E114** \*Limit flag and flagpole size. Flags and flagpoles may not be of unreasonable size and weight.

As a guideline, reasonable flags are less than 3 ft. by 5 ft. ( $\sim$ 91 cm by 152 cm) in size and weigh less than 2 lbs. ( $\sim$ 907g). Reasonable flagpoles may not be more than 8 ft. ( $\sim$ 243 cm) long and weigh less than 3 lbs. ( $\sim$ 1360g).

**\*No firearms.** Firearms are prohibited at all *FIRST* events for all *FIRST* programs, including without limitation, <u>all official FIRST Events posted here</u>. This policy does not apply to law enforcement or venue security personnel.







**\*Only COTS batteries allowed.** Teams may only bring COTS batteries to events. Output wires or connectors may be modified as long as no safety systems are compromised.

Violation: Teams will be asked to remove or not bring in the batteries.

**\*Enter only 1 ROBOT**. Each registered *FIRST* Robotics Competition team may enter only 1 ROBOT (or "robot," a ROBOT-like assembly equipped with most of its drive base, i.e. its MAJOR MECHANISM that enables it to move around a FIELD) into a 2025 *FIRST* Robotics Competition Event.

"Entering" a ROBOT (or robot) into a *FIRST* Robotics Competition means bringing it to or using it at the event such that it's an aid to your team (e.g. for spare parts, judging material, or for practice).

While "most of its drive base" is a subjective assessment, for the purposes of this rule, an assembly whose drive base is missing all wheels/treads, gearboxes, and belts/chains is not considered a "ROBOT." If any of those COMPONENTS are incorporated, the assembly is now considered a "ROBOT."

This rule does not prohibit teams from bringing in ROBOTS from other *FIRST* programs for the purposes of awards presentations or pit displays.

## 14.2 Machine Shops

Some events host a machine shop, open during specific hours (see the event's agenda), to help teams with repair and fabrication of their ROBOT. Machine shops are typically sponsored by NASA or local organizations. While the machine shops vary, *FIRST* strives to have welding and a variety of high-powered tools available at all events.

In most cases, the machine shop is on site and readily accessible to all teams. If a team attends an event where the Machine Shop is off-site, volunteers are in place to transport the ROBOT or parts to and from the machine shop. In this case, a team fills out a Machine Shop Request Form that travels with the ROBOT or parts, so the machine shop staff and volunteers can follow their directions. The event should set up a method of communication between the venue and off-site machine shop in case there are any questions.

**\*The ROBOT goes alone to off-site machine shops.** Team members may not travel to off-site machine shops with the ROBOT being transported by volunteers.

Teams may travel to the off-site machine shop on their own, either by walking or using their own vehicle, but all STUDENT team members must be accompanied by an adult at all times. Teams should strongly consider including a third team member per the FIRST Youth Protection Program guidelines.

### 14.3 Wireless Rules

**\*No wireless communication.** Teams may not set up their own 802.11a/b/g/n/ac/ax/be wireless communication (e.g. access points or ad-hoc networks) in the venue.

A wireless hot spot created by a cellular device, camera, smart TV, etc. is considered an access point.

Some smart TVs have access points enabled by factory default. Please make sure that functionality is disabled for any TVs brought to the event.





**\*Don't interfere with wireless networks.** Participants may not interfere, attempt to interfere, or attempt to connect with any other team or *FIRST* wireless communication except as expressly allowed for purposes of communicating with their team's ROBOT on the FIELD or Practice Field.

Teams are encouraged to report suspected wireless security vulnerabilities to the *FIRST* Technical Advisor (FTA) if at the event or to *FIRST* via customerservice@firstinspires.org.

Violation: Subsequent violations may lead to dismissal from event and/or legal action based on applicable laws.

**\*Tethered operation outside FIELDS/Practice Fields.** ROBOTS may only be operated by tether when outside the FIELD or Practice Field.

## 14.4 Load-In

Events set specific time frames, published on the event's schedule, in which teams are invited to load their ROBOT and equipment into their pit areas before pits officially open.

Load-In can be stressful for teams and volunteers, which can be mitigated by preparation and planning. Unanticipated factors, like traffic or weather, can change a team's scheduled arrival time, making the process difficult. The most important things a team should remember are to be safe, gracious, and professional. Teams who experience smooth and easy Load-Ins are encouraged to check with others to see if they can help and make their experience as positive as possible.

- **\*Load in during Load-In.** Teams may not bring the ROBOT or ROBOT elements into the event after the designated Load-In period. Exceptions are as follows:
  - A. exceptions listed in R304
  - B. raw stock
  - C. COTS items
  - D. gearboxes attached to associated motor(s)
  - E. assembled wheels
  - F. exceptional circumstances that result in a team not being able to make the Load-In time and has made arrangements with Event Management.

There are no rules that explicitly restrict items that may be brought into the venue during the designated Load-In period.

If an event does not have a designated Load-In period on its Public Schedule, the designated Load-In period begins when pits open and ends when opening ceremonies start.

During Load-In, teams are not limited to a single trip, and are encouraged to be as efficient and safe as possible.

Violation: Item will not be permitted into venue.

**\*Load-In person limit is 5.** Only 5 team members (one of which must be an adult) may be in the pit area during any Load-In period prior to pits opening.

Violation: Extra team members must leave the venue.

- **E403** \*Load-In Restrictions. The only team permitted activities during load in are:
  - A. bringing materials into their pit area.





- B. ROBOT and BUMPER weighing (if available at your event), including any necessary BUMPER installation or removal
- C. Early Pit Setup (if available at your event)

Violation: Teams will be asked to leave the pit area.

- **E404** \*Pit must be left in a safe state. Teams must have their pits in a safe state by the time pits close (even if some tasks are left undone).
- **\*Once done, head out.** Unless assisting other teams per the introductory language in this section, teams must leave the venue once finished delivering materials (or, in the case of Early Pit Setup, when setup is complete).

If an event has designated Early Pit Setup times both the evening before and the morning before pits officially open, a team may use both periods for Load-In and setup, but per this rule must leave once pit setup is complete.

Violation: Teams will be asked to leave the pit area.

## 14.5 Pits

A team pit is the designated space, usually 10 ft. by 10 ft. ( $\sim$ 3 m x 3 m x 3 m), where a team may work on their ROBOT. Each team is assigned a pit space marked with their team number. This helps team members, judges, and visitors find teams easily. Each team pit has a power outlet and a table may be provided.

Teams, volunteers, FIRST staff, and guests spend a lot of time in the pits. Get to know other teams and help each other when you can. Time is short and help is very often right "next door" in the adjacent team pits.

Small, bench-top machinery, with appropriate guards, is permitted in team pits. 'Small' machinery is machinery that can be easily lifted by one person and examples include, but are not limited to, small band saws, drill presses, desktop CNC mills, and sanders.

- **E501** \*Pits are unavailable if closed. Teams may not be in their team pit outside the designated pit hours.
- \*Stay in your pit. Teams may neither allow their materials to expand beyond their team pit (including running power or internet lines from their team pit to any other area), swap team pits with other teams, nor move themselves to empty team pits.
- **E503** \*Keep aisles clear. Aisles must be kept clear.
- **E504** \*No sparks. Tools that throw sparks or produce open flames are prohibited.

Examples of tools that violate this rule include, but are not limited to, welders, bench and angle grinders, gas torches, etc.

**E505** \*Nothing too big. Floor standing power tools are prohibited.

Examples include but are not limited to full-size drill presses, band saws, and table saws.

Violation: Teams will be asked to remove or not bring in floor standing power tools. Any items that are deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed.

**E506** \*No brazing or welding. Brazing/welding is prohibited.







Violation: Teams will be asked to remove or not bring in brazing/welding tools. Any items that are deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed.

**\*Solder with specific tools only.** Soldering may be done using an electric iron/gun only.

Violation: Any items that are deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed.

**\*Structures must be safe.** Teams may not build any structure that supports people or stores items overhead.

Violation: Any pit structures that is deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed.

**\*Secure team identification assets.** Team signs, flags, and displays must be securely mounted to the pit structure.

Violation: Any pit structures that is deemed unsafe or outside specifications by FIRST personnel, event management, and/or local committee members must be removed.

## 14.6 Practice Areas

FIRST Robotics Competition Practice Areas are intended to allow teams to interact with representative FIELD elements and to test their starting AUTO modes, they are not designed for multiple SCORING ELEMENT AUTO modes or full FIELD play. Although some Practice Fields may provide more space for additional strategy development, ample space for long full FIELD interaction should not be expected. FIRST provides a recommended layout, but events may need to tweak exact placement depending on the space available in the venue. Teams should not relocate elements from their original locations. The layout is specifically intended to discourage testing of complex AUTO routines.

Practice Fields are tether-only except for some District Championships and *FIRST* Championship which may choose to run a full Field Management System on a Practice Field. For events that have full FIELDS but are using tether, teams should expect that 2 teams are allowed on half the field at a time. Practice Field Attendants may allow additional teams provided teams are a safe distance from one another.

FIRST is providing a small set of production run AprilTags for the Practice Field. The tags provided for the 2025 Practice Field will include tags 1, 3, 5, and 6. Teams that wish to use other AprilTag IDs for the Practice Fields may print copies of other tags to bring with them to events but should not remove the provided tags. Printable copies of the field AprilTags can be found on the 2025 Playing FIELD webpage.

FIRST is also providing a minimum of one "crosshatch" pattern ALGAE which is representative of the ALGAE used on the competition FIELD. Teams may not damage or remove it from the Practice Areas, as the supply is limited. Additional crosshatch ALGAE may be available depending on supply. CORAL is not provided and if a team wishes to practice with CORAL, they must bring their own.

HUMAN PLAYERS are welcome to practice throwing ALGAE into the Practice Field NET as long as the area around the BARGE is clear of other ROBOTS and humans to avoid missed shots hitting people or interfering with ROBOT testing. Priority is given to ROBOT practice over HUMAN PLAYER practice. Teams choosing to practice throwing ALGAE must bring their own ALGAE; the provided ALGAE are for ROBOT use only.

- **\*Inspection for Practice Fields.** A team may only use the designated event practice areas with a ROBOT that has passed an initial, complete inspection.
- \*Practice only when/where permitted. Teams may only practice with their ROBOT in their pit space, in the designated event practice areas, or while in a Practice MATCH.





Teams may not set up their own practice equipment outside their pit. When practicing in their pit, safety must remain the top priority. If Event Management determines a pit practice setup is unsafe or interferes with activity in adjacent pits or aisles, the team must discontinue the activity.

**E603** Practice Field attendance is limited. Only team members actively working on the ROBOT are allowed to be on the Practice Field.

The intent of this rule is to limit the number of people directly next to ROBOTS that are enabled. The recommendation is no more than 5 members per team, but some events may limit further due to available space.

Teams may have additional team members watching from a distance, provided the venue has space, but those members should be a safe distance from all ROBOTS operating at the Practice Field.

**E604 Give ROBOTS space.** When using a tether on Practice Fields, teams must keep a safe distance from all ROBOTS and moving elements and must not interact directly with the ROBOT when it is enabled.

Generally, a safe distance is ~6' (~182 cm) from the ROBOT.

- **E605** Be ready to DISABLE. Teams must be ready to DISABLE their ROBOT if the ROBOT does not move in the desired direction or in case of safety.
- **E606** Be safe. G102 and G103 also apply at the Practice Field(s).

Violation: VERBAL WARNING. Practice Field suspension if subsequent violations during the event.

### 14.7 ROBOT Carts

Most teams use carts to transport their ROBOT throughout an event. Carts are not required but are strongly recommended (to minimize risk of muscle strains, dropped ROBOTS, and other hazards). In addition to the rules listed below, teams are strongly encouraged to put the team's number on the cart, refer to the <a href="#">FIRST</a> <a href="#">Safety Manual</a> for ROBOT lifting techniques, and practice putting the ROBOT on and off the cart to develop a safe, quick, fluid routine.

- **E701** \*Carts must be safe and easy to use. Carts must be easy to control, maneuver, and pose no risk to bystanders.
- **E702** \*Carts shouldn't be too big. Carts must fit through a standard 30-inch door.
- **E703** \*Carts can't park anywhere. Carts must remain in the team pit (or cart staging area if during a MATCH) when not in use.
- **\*No noisy carts.** Carts may not be equipped with music or other sound-generating devices, except for devices of reasonable volume used for safety purposes (e.g. to make others in the vicinity aware that a ROBOT is on the move).
- **E705** \*No motor driven carts. ROBOT carts may not use powered propulsion.
- **\*Small ROBOT carts are allowed on the FIELD**. ROBOT carts smaller than 2 ft 6 in. (~76 cm) by 3 ft. (~91 cm) may be brought onto the FIELD to aid in staging and retrieving the ROBOT provided they are not left unattended and do not pose any other safety hazards.





## 14.8 Ceremonies

At every event, there are Opening and Closing Ceremonies to show honor and respect for represented countries, sponsors, teams, mentors, volunteers, and award winners. Ceremonies provide everyone with the opportunity to collectively applaud the successes of all participants. They also give teams a chance to "meet" the volunteers and other people and sponsors involved with the event. Closing Ceremony elements at the end of the event are integrated into and presented between Playoff Matches.

At the Awards Ceremony, *FIRST* presents trophies and medallions to outstanding teams. All team members are encouraged to attend the ceremonies, be punctual, and show appreciation to volunteers that staffed the event.

**\*If in the pits during Ceremonies, shhhhhh.** During Ceremonies outside of Playoff MATCHES, team members may not:

- A. use power tools
- B. use loud hand tools (hammers, saws, etc.)
- C. shout, yell, or use loud voices, unless as a demonstration of approval during a ceremonial activity.
- **\*Pit person limit during Ceremonies is 5.** No more than 5 team members may be in the pits during Ceremonies outside of Playoff MATCHES.
- \*Be respectful during anthems. Team members, including any remaining in the pits, should exhibit peaceful behavior during the presentation of all national anthems. Traditionally, team members stand to face the flag, remove hats, and either sing along or maintain a respectful silence during the anthems of all nations present at the event. If team members wish to abstain, they have a right to do so, as long as they remain silent and non-disruptive.

### 14.9 In the Stands

**\*No saving seats.** Teams are not permitted to save or designate seats for team members that are not present.

Teams may not hang banners or ribbons or otherwise designate seating. (Event staff will remove and discard any banners, roping, etc., used to designate seating.) Please take turns sitting in the bleachers/stands if seating is limited. If there is a crowding problem, we ask that you kindly leave after your team's MATCH and return later, if possible.

Event management may reserve seats for attendees who require accommodations.

**E902** \*Don't throw items from the stands. Items may not be thrown from audience seating.

