



## Rule Clarifications

**Last Revised: May 15, 2018**

### **General Lego Rules**

**Q:** How will you enforce the requirement of using Lego Mindstorms kit pieces for robot construction?

**A:** We will allow any piece for decoration. Otherwise, judges will be looking for motors and sensors the most closely. For the remaining parts of the robot, it will be more based on how the pieces are used and whether they pose an unfair advantage over other teams, as inspectors have less than an hour to inspect 80 robots that could contain up to 2000 parts each. For example, the plastic ramp cover that was seen in a few teams last year for the Carleton U. sumo challenge (please consult our Work Period slides) will certainly not be allowed in for this year's competition, as it provided teams with an enhanced ability to get the part to gain an unfair advantage over other teams who could not get the part as easily. Below is another part that would not be allowed if it is being used to make a ramp as it does not come from a Lego Mindstorms RCX, NXT, or EV3 kit. However, it can be used for decorative purposes.



### **Carleton U. Sumo**

**Q:** What if a piece of the robot falls off of it and touches the table, does the robot lose in that case?

**A:** We have clarified the rules. Judges would have never counted that case as a loss.

### **Drag Race Challenge**

**Q:** If both robots collide into each other, how would that be scored? Does it count as interference? If so, which one is the interfering robot?

**A:** They will receive 0 points for failing to complete the race and -1 point for leaving their lane. The rules have been clarified to make it clear that interference only applies when there is a robot that left its lane and a robot that stayed in its lane.

**Q:** What happens if a robot crosses into another lane and the robot in the correct lane crashes into it?

**A:** While this has not been seen yet, we are clarifying the rules such that the offending robot will always be the one that left its lane.

**Q:** Is it possible that a team may have an advantage over another as the wall is moved back between 20 cm and 35 cm?

**A:** This was piloted on one of the tracks in last year's competition without issue. It has also since been clarified that we will still lift the wall upwards after it has been quickly moved back beyond 35 cm on the track.

### **LRT Detour Challenge**

**Q:** What is the width of the electrical tape on the track?

**A:** It is half the width of regular electrical tape.

**Q:** How many obstacles will there be?

**A:** There can be up to 10 obstacles. Last year, the judges placed down 7 or 8 obstacles towards the end.

**Q:** Does time continue to count down if you bump into an obstacle?

**A:** Yes, but your robot will be replaced back at the start.

**Q:** Will the robot always start and end in the same intersections?

**A:** Yes, it will always start in the top left intersection and end in the bottom right.

**IBM Green Arm Challenge**

**Q:** Will bins be placed one at a time this year like last year?

**A:** Maybe. The rules currently say no, but our judges will be working with teams during the practice rounds in the morning before finalizing this decision.

**Q:** How will the shapes be placed on the bins?

**A:** They will be black shapes of 1" by 1" printed on white printer paper and taped to the top of the bins.