

Race Across Campus 2004

Rules

1. All teams start at the same time
2. Stages must be completed in order. You may start work on any stage at any time after the start, but in order to get credit for completing a given stage, all previous stages must already be completed.
3. All robots and programs must be created during the race; no pre-built robotics or programs will be accepted.
4. You may not touch or influence your robot while it is doing a challenge
5. Team members can use anything that they bring with them.

Preparation

Set up your computer and Lego kit at stage 1. Make sure that:

1. Your RCX works
2. Your Laptop has RoboLab
3. Your tower is working

Once you are set up at stage 1, if you have more than one laptop/lego kit, you may set them up at other stages, but remember that you may not start building or programming at a stage unless all previous stages have been completed. Once you are done setting up, return to the stage 1 area for the pre-race discussion of rules.

Extra batteries are available if your RCX batteries die.

Challenges

Stage 1: Do the Hokey Pokey

Just like the song says...build a robot that puts its left foot in, takes its left foot out, puts its left foot in, and shakes it all about. Then do the hokey pokey and turn itself around. That's what it's all about. (If your robot has wheels instead of legs, left foot in = rotate clockwise 90 degrees, shake it all about = rotate back and forth quickly)
Music will be provided.

Stage 2: Find the Shortcut

Follow a line on the ground that loops back to the original position. You can either go all the way around the track or save time and take the shortcut. Your robot must stay on the line at all times.

Stage 3: Mini-RoboGolf

Build a robot that rolls a ball up a ramp and puts it into a hole. There is a line at the top of the ramp to guide your robot to the hole

Stage 4: Field Goal!

Build a robot to carry a ball from the sideline to an X at the center of the field. Then pass the ball between the uprights. You can either throw the ball from half field or move as close to the uprights as you want. Ten minutes will be deducted from your total time if you make the field goal from midfield!