



Discovering STEM talent
Events | Competitions | Conferences

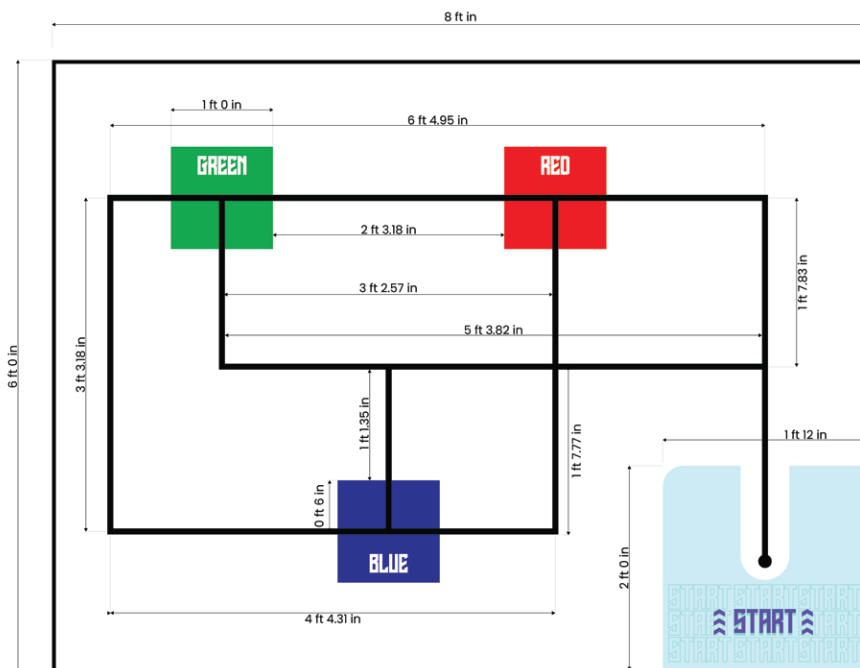
CODING QUEST

(Senior Category)

AGE
15&
ABOVE

- Participants must pre-program their bot before the challenge begins.
- The bot's task is to collect cubes from designated color zones and deliver them to their matching color zones.
- The bot must operate fully autonomously, with no manual control allowed during the challenge.
- Once started, the bot should navigate the entire arena and complete the task on its own.
- The challenge must be completed within **10 minutes**.

Arena mat Design:



How to practice:

First, use the provided tape to mark the arena according to the given sizes.
(Check the arena mat design above.)

Put every cube into a mismatched color box.

Example:

Case 1: ■ Red cube is in ■ Blue box.

Case 2: ■ Blue cube is in ■ Green box.

Case 3: ■ Green cube is in ■ Red box.

Your robot should:

1. Pick the red cube → place it in the red box
2. Pick the blue cube → place it in the blue box.
3. Pick the green cube → place it in the green box.

Tips:

- Use a **stopwatch** while practicing
- You can program your robot using the Arduino IDE.
- Make sure your robot is fully ready before the event day.

Note:

All required arena elements will be provided in the kit, and you will have the same elements on the day of the event.

Rules & Regulations:

- 1 During the final match, you are not allowed to change your robot's code once it enters the arena.
- 2 The robot must start from the designated starting point in the arena.
- 3 Each team may have up to 4 members (excluding mentors). Only one mentor is allowed per team.
- 4 Limited teams can participate in this challenge.
- 5 Scoring:
5 points will be awarded for each cube completely removed from a different-colored zone.
10 points will be awarded for each cube placed correctly in its matching colored zone.
- 6 Final Score = Points for all cubes picked up + Points for all cubes placed correctly.
- 7 The challenge has a maximum time limit of 10 minutes.