

CIJE Robotics League 2024-2025

The CIJE Robotics League challenges Elementary (4-5) Middle (6-8) and High School students to work together to build a robot that will compete in a challenge. Schools participate by either running a Robotics class or forming an extracurricular Robotics Club. Students learn advanced programming, mechanical building, teamwork and problem-solving. The annual theme and challenge are based on the official Vex Robotics Challenge.

CIJE runs multiple tournaments throughout the year (included with your membership), and provides logistical support, but does NOT provide technical engineering mentoring or equipment. Your school should provide a robotics coach to meet with the students and guide them in competition rules and their own discovery.

Goals of the CIJE Robotics League

- Facilitate teamwork through authentic multidisciplinary tasks.
- Engage students in problem solving.
- Encourage learning through trial and error.
- Hands-on experience in mechanical building.

Scheduling

- An hour a week (e.g. club hour) with the expectation that students will spend significantly more time in the weeks leading up to a tournament.
- Schools may establish robotics teams as part of the academic day or as an extracurricular activity.

Space Requirements

- A room where students have space to build and drive robots and easily access tools and hardware.
- The ideal storage is a (lockable) classroom; at a minimum, a dedicated locked cabinet is necessary.

Team Structure

- Elementary School: We recommend a team of 2-3 students.
- Middle School: We recommend a team of 2-3 students.
- High School: We recommend a team of 5-7 students.

CIJE Support

- CIJE will develop the game rules and tournament structure.
- CIJE will provide, included with your membership, sample game elements for that year's competition.
- As in other robotics leagues, technical support is NOT provided.

Competition

- An official CIJE competition rulebook will be shared at the beginning of the school year.
- Schools are welcome to include as many teams as they would like. All teams are independent of each other; there is no school average. Including weaker teams does not decrease your school's chance of winning.

Tournaments

Tournament dates can be found at <u>www.thecije.org/robotics</u>

- Elementary School: Tournaments take place only in the NY/NJ area and are coed.
- Middle School: Takes place throughout the country, with additional boys-only and girls-only options.
- High School: Tournaments take place only in the NY/NJ area and are coed.

Equipment

Equipment can be purchased through CIJE or VEX, the price is the same. Purchasing directly from Vex will decrease delivery time. If CIJE is not tax-exempt in your state, taxes charged by VEX are passed on to the school.

Elementary School VEX Go:School's cost is \$209 per team + ShippingMiddle School VEX IQ:School's cost is \$679 per team + ShippingHigh School VEX V5:School's cost is \$1,993.95 per team + Shipping

Purchase directly from VEX:

Elementary school: GO Kit with Storage SKU#: 269-6705

https://www.vexrobotics.com/go-kits.html

Middle school: VEX IQ Competition Kit (2nd generation) SKU#: 228-7980

https://www.vexrobotics.com/iq-competition-kits.html

High school: V5 Competition Super Kit SKU#: 276-7040

https://www.vexrobotics.com/v5-competition-super-kit.html

Purchase through CIJE: https://www.thecije.org/robotics

Additional Equipment

- Elementary School: It is recommended each school acquire a VEX GO Competition Field Kit to practice on throughout the year: <u>https://www.vexrobotics.com/269-8115.html</u>
- Middle School: We recommend a 6'x8' robotics rink (walls and a floor). The rink does not change from year to year. The game pieces (aka "elements") differ from year to year. CIJE provides the minimum game "elements" (e.g., balls, hoops, etc.) needed to test your robot.
- High School: We recommend schools purchase the surface (flooring) to test their robots. The game pieces (aka "elements") differ from year to year. CIJE provides the minimum game "elements" (e.g., balls, hoops, etc.) needed to test your robot.

Application

Apply <u>Here</u> for the 2024-2025 season.

Questions: Please contact Adam Jerozolim at AJ@thecije.org