

2011 CEENBoT Showcase

Competitive Events For Registration:

Ball Course:

CEENBoT - wired and wireless

TekBot - wired and wireless

Description: Ramps and drop a ball in the hole

Driving maze:

CEENBoT - wired and wireless

TekBot - wired and wireless

Description: Blind Driving involving two people with only one being able to see the course, moveable barricades within a grid as well as other moveable parts.

Driving Course:

CEENBoT - wireless

TekBot - wireless

Description: Balancing, carrying an object up and down ramps and over terrain

Autonomous Programming Courses: GPI – Graphical Programming Interface, TI-Graphing Calculator, or CEENBoT API (C-Programming)

Description: Autonomous programming: possibly involving knocking over blocks, popping balloons, bumping off obstacle, straight across ledge.

Presentations

The theme for presentations this year will be “**Robots: Past, Present, or Future.**” The current 324 CEENBoT robotic platform could be a topic for presentation, or discuss their version of the future for robotics. Part of the scoring for presentations includes timely setup and conclusion of the presentation, in addition to illustrative examples. We will have an overhead projector for your use, and you will need to bring a laptop and cord to plug it into the system.

Creativity

The theme is “**What is a robot?**” You will put together a tri-fold display, and you can build a robot from any materials in any configuration and talk about it, *or discuss what you are doing with the CEENBoT in the classroom with STEM principles.* Robot displays may be based on real robots, or robots you would design for the future. Some ideas for consideration include, but are not limited to:

- 1-Defining what a robot is
- 2-Listing/showing examples of robots, both real and imagined
- 3-Impacts robots have in our lives: past, current, and future

This event is intended for students to spend time investigating robots, and learning from one another’s displays at the event. Displays will be set up at the beginning of the morning. Judges this year will be the freshmen engineering students from PKI. Your display may also be used in the presentation category.

Documentation Notebooks

Notebooks are the same as last year’s, and the example is available on the website.

Sample Demonstration Robot Events:

These are fun, carnival-like drop-in events, and *open to all who attend the expo.*

Minute to win it: Bumpbot mode

Description: Grid with start and finish box, and obstacles to bump off of. Time trials and penalties.

Minute to win it: GPI/TI programming mode (5 minute per set)

Description: could involve bringing own functions, multiple trials, multiple times, multiple options

Driving a maze

Description: with fun obstacles, maybe even with texting and driving with a leader board

CEENBoT Golf

Description: Each hole on the course may have obstacles, corners, ramps, or any other object similar to what would be found on a mini-golf course.

CEENBoT Taekwando

Description: Bot maneuvers his/her Bot and attempts to hit or touch the opposing Bot on an unprotected side. The contest ends at the end of two minutes of actual competition or when one player scores three points.

CEENBoT Bowling

Description: Bot maneuvers his/her Bot and attempts to hit down all 10 pins by driving straight. Two attempts to make a spare.