

# Greene County 4-H ROBOTICS Challenge

2019 Robotics Challenge will bring together Indiana 4-H members, 4-H Mini members, and supporters to showcase the learning and accomplishments of youth STEAM programs throughout the 2019 year.

## 2019 Challenge:

Teams may choose one of two competitions to compete in:

1. **Obstacle Course:** A series of 3 distinct obstacle courses will be available for teams to complete. They will build and program for this part.
2. **Build It:** Teams will build a robot that completes a task. Teams may choose that task, build and program for that particular task. Teams will be judged on complexity of the build, teamwork, and creativity, as well as how well it works.

## Guidelines:

- Teams will have from approximately 10:00 am to 2:00 pm to build, program, and complete the challenges for each category.
- Teams must consist of 2-5 individuals.
- Entry Fee: \$25.00 per team, payable day of.
- Equipment: Teams can use any approved robotics systems. With the variety of robots available, teams may use any robot that is programmable. Controllers will not be allowed for this competition.
- All equipment must be disassembled prior to the event.
- Teams are allowed to use printed or online instructions to help build the robots.
- The challenges will be broken up by age division: Mini (Grades K-2), Beginner (3-5), Intermediate (6-8), and Advanced (9-12) categories.
- The theme will be Winter Wonderland. The specific obstacle course challenge will be announced at the contest.
- There is no limit on entries from a county.
- Any term, condition or interpretation not covered here will be decided by the challenge organizers. Their decisions will be final.
- WiFi is available within the challenge building.

## ARE YOU READY TO TAKE THE CHALLENGE?

### WHEN:

Saturday, April 6, 2019

Registration @ 9:00am

Orientation @ 9:30 am

Challenge Starts @ 10:00 am

Awards Ceremony @ 2:30 pm

\*All times Eastern Time Zone

### LOCATION:

Greene County 4H Fairgrounds

4503 W State Road 54

Bloomfield, IN 47424

### REGISTRATION:

Via [in.4honline.com](http://in.4honline.com)

or

Contact the Greene County Extension Office for registration . 812-659-2122 or [sgroomer@purdue.edu](mailto:sgroomer@purdue.edu). No limit on number of teams a county can enter.

Entry Fee: \$25 per team, payable day of or on 4hOnline.

### REGISTRATION DUE:

**March 22, 2019**



# Greene County 4-H ROBOTICS Challenge

## CONTEST SPECIFIC GUIDELINES

### Obstacle Course:

Teams will be given 2 chances to complete each obstacle course for a score. Teams are allowed an unlimited amount of trial runs prior to scoring.

The obstacles will open starting at 10:00 am. and each team will receive a punch card. A judge will punch the card for each scoring run per course (2 punches per obstacle course).

Once completed with the punch card, you will turn in the punch card to one of the judges.

The team must use autonomous programming for the robot.

Expansion kits or more than one robot can be used by teams in preparation, but only one robot can be used on the course.

Teams will be encouraged to use resources to help them the day of. For EV3 and NXT, it is encouraged to learn how to use the Lego Educator. This is a great resource on challenge day!

### Build It:

Teams will have one chance to build and program a robot to complete a task in front of the judges.

The task is the choice of the team, but they will be judged on complexity, ability to communicate the task, and the ability to work as team.

The task must be autonomously programmed for all age divisions.

Teams may use extra parts and expansion kits for this challenge. They may use more than one BRAIN for this challenge, but they must be communicating together within the robotics system.

### REGISTRATION INFORMATION:

Contact Greene County Extension Office; 812-659-2122.

1. Team Name
2. Category in which your team is entering .
3. Names of all team members (2-5 members per team).
4. Grade for each team member as of School Year 2018-2019.
5. Entry Fee: \$25 per team, payable day of.

For more information: Malea Huffman, 4-H Greene County Educator, [huffmanm@purdue.edu](mailto:huffmanm@purdue.edu) or 812-659-2122

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