



Quick guide: BEST Robotics

What is BEST Robotics?

BEST stands for Boosting Engineering Science and Technology, and is a national program with fifty local competition sites in eighteen states. It is administered by BEST Inc., a 501c3 non-profit organization, that sets curriculum and competition standards.

The mission of BEST is to inspire students to pursue careers in science, technology, engineering, and mathematics through participation in a competitive robotics program that fosters knowledge, teamwork, and communication. A major tenet of the program is that it is free to schools; there is neither a cost for the robotics materials nor to enter a team.

The competition is open to middle and high school students. There is no limit to the number of students who can participate on the team; however, each school may only enter one team.

More information about BEST Robotics Inc. can be found at <http://www.bestinc.org>

War Eagle BEST (local): www.wareaglebest.org

South's BEST (regional): www.southsbest.org

How does the competition work?

There are two parallel competitions associated with the BEST program – the robotics competition and the BEST Award.

The robotics competition is a high-energy sports-like environment but good sportsmanship is essential. Student-driven robots compete against the challenges of the game, not other robots. Each year's game theme and playing field is revealed by mid-September. Teams all across the country are provided with an identical kit with equipment and parts. Teams are also given a set of game specific rules before entering their local competition, then given six weeks to design and build their robot.

In addition to the robotics portion of competition, all teams must complete and provide an engineering notebook. Students may also choose to compete for the BEST award, which includes giving an oral marketing presentation, constructing an educational team exhibit, and showing excellent team spirit and sportsmanship. BEST uses the excitement of robotics to teach engineering and business processes.

The competition involves four events:

- **Kick-Off Day (late August)** – Game challenge and playing field unveiled; “42 Days of BEST” begins

- **Mall Day (mid-September)** – Teams are given the opportunity to practice-drive robots on a playing field set up in local mall
- **Game Day (mid-October)** – Competition takes place; winners from Robotics and BEST Award divisions advance to the regional championship
- **Regional Championship (early December)** – Winning teams from all hubs within a BEST geographical region compete for the regional title in Robotics and BEST Award

What is the cost to participate?

The competition is **FREE** for schools to participate. At the bare minimum, the only costs your team will incur are expenses related to traveling to/from Auburn for the competition events. Auburn University will loan robot equipment to the participating schools for the duration of the 6-week build and competition period. All materials must be returned after the competition is completed unless the team is advancing to the regional competition (South's BEST). Additional costs may arise from t-shirts, building a practice field, or traveling locally for community outreach.

How can I get involved?

- **Start a team**

Each school can enter only one team in the competition (this includes public, private, and home schools). There is no limit to the number of students that may participate on each team. Space in the local competition is limited; War Eagle BEST hosts between 22-25 teams each year. The following are recommended as you start your team:

- **Advisor/primary point of contact** – A person, typically a teacher within the school, to coordinate the efforts of the team and communicate with the Hub for competition information and updates.
- **Workspace** – An area with basic workshop tools to aid in building the robot.
- **Mentors** – Professionals (may be parents or other affiliates) from the area who are willing to help the students with their robot. Often mentors will include engineers, skilled workers, or those willing to help with building, learning, or problem solving.
- **Funding** – The competition is free, however, there may be minimal travel costs to Auburn. Additionally many teams create and wear a team t-shirt to the competition (and even have an opportunity to enter the shirt for an award). Other costs may include building a practice field, etc.
- **Interest** – A group of students motivated to build a robot, write and organize an engineering notebook, and *optionally* design a team exhibit and deliver a marketing presentation.
- **Time commitment** – Participating in BEST requires enthusiasm, motivation, and *most importantly*, time dedicated to helping your team and students. The 6 weeks (42 Days of BEST) are fast-paced and packed with activity: be prepared.

For more information on how to start or register a team, please see the detailed guide provided on the regional competition website, www.southsbest.org, or contact Kristen Bond by email at kristen.bond@auburn.edu or by phone at (334) 844-5769.

- **Be a mentor**

The role of the team mentor is to work with the teacher/advisor to guide students through the engineering and design process, including overseeing the building of the robot. Mentors can donate as much time as they feel is appropriate, however, the *students* should be the primary builders and designers.

Mentors can be engineers, college students or faculty, trade/professional people, and other community members interested in helping middle and high school students.

- **Be a judge or volunteer**

Volunteers are integral components of a successful BEST competition! They help staff with competition logistics, serve as judges for the engineering notebooks and BEST Award components of the competition, and work as referees during the game.

We are always looking for interested individuals to volunteer and judge with us, for both the local (War Eagle BEST) and regional (South's BEST) competitions. For more information, please see the first page of this document for links to each competition's website.

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