In the *Inventions Contest* teams will create and develop a unique robotic invention that will solve a problem. Student teams will need to approach their problem as a real team of engineers working together to solve a common problem using the Engineering Design Process. The Engineering Design Process is a particular course of action and sequence of operations intended to achieve a result or produce an outcome. The Engineering Design Process consists of the following steps:

- Research
- Plan
- Prototype
- Document and Test
- Commercialize

All teams will be responsible for keeping a logbook for every time the team meets that describes each step of the engineering design that was taken in the creation of their robotic invention. Judging criteria will be based on student teams presenting their step-by-step process, as well as documentation in their logbook. Students should use the invention scoring rubric as a guide to planning their project and presentation and for providing talking points for their presentation to the judges.

Note: Based on feedback from sponsors, judges, students, and parents, some of our rules have been revised. For safety concerns, the number of people allowed in various locations during the contests (such as the pits) is controlled. Additionally, for fairness purposes during the contests, communication as well as the amount of assistance sponsors can provide in setup/teardown is limited. Please carefully read through the rules below.

**Inventions Specific Rules:**

1. Each team will have a 6 ft. table to conduct their presentation on and will be limited to a 10 ft. by 10 ft. area which will include the table. Teams are not required to use the table. If presentation goes outside of their designated area during the presentation, the final score will have 20 points deducted for the “Non-Compliance of Rules”.
2. Presentation time is limited to 6 minutes. Teams will be notified as they approach the 5 minute mark as well as the 6 minute mark. If presentation goes over 6 minutes, the final score will have 20 points deducted for the “Non-Compliance of Rules”.
3. Parents, sponsors and spectators may not be in the inventions area during a competition.
4. At contest the students must be able to construct their invention on their own without sponsor intervention. Every part of the invention must be completed by the students on the team. Example: parents/sponsors cannot use power tools to assist the students construct their project onsite. If power tools are needed and the students are unable to use them, then the team needs to come up with a different plan/invention.
TCEA Robotics Inventions Contest Rules 2011-12

Team/General Rules:
1. Teams are led by at least ONE team sponsor and are composed of at most FOUR students (per team). Students are not allowed to be part of multiple teams.
2. The team sponsor must be a TCEA member.
3. All teams are required to have a team name and it must meet common school standards.
4. Only registered students are allowed to touch the robot and computer that is used to program it – the only exception is when technical problems with the computer occur. Live student problem solving is the spirit of this competition!
5. Only registered students will be allowed in the team work area/competition arena area.
6. Teams must designate one student member to be the TEAM CAPTAIN. The team captain is the only person from a team that can review and/or initial score sheets or dispute field setup with the referees.
7. Students in grade levels 4th – 8th may compete in either Intermediate or Advanced level competition.
8. Students in grade levels 9th – 12th may ONLY compete in Advanced level competition.
9. Teams must compete in their designated area unless there are not enough teams in their area to hold a contest. You may contact your area director with questions.
10. For the area contests, each school may enter no more than four teams, per category, without permission from the area director. If space is available, the area director may allow schools to register more than 4 teams. (Each school can have 4 teams in Advanced Arena, 4 teams in Advanced Inventions, 4 teams in Intermediate Arena, and 4 teams in Intermediate Inventions. This makes a total of 16 teams from one school.)
11. A maximum of two Arena and/or Inventions teams from each school in each grade level division may advance to the state competition.
12. Wildcard teams will be selected for all remaining available space at the state competition. Wildcard teams are selected by comparing all area results to determine the top scorers who did not place 1st or 2nd at the area contests. These teams will receive an invitation (depending on the number of spaces available).
13. Schools qualify for the state competition, not individual team members. The individuals that actually make up a team at the state competition are the decision of the team sponsor and the school’s principal.
14. NO late or onsite registrations will be allowed at the area or state contests.
15. During the competition, students may not communicate with anyone except other registered students and competition staff; this prohibits all forms of communications, including but not limited to live and electronic communication (talking, texting, videos, etc...). If the need arises to communicate with anyone else (sponsors, parents, etc...) the students should request competition staff to coordinate.
16. Before and after each contest pit volunteers will carry heavy equipment in and out of pit area at state and area contests. Sponsors/parents will not be allowed in the pit area.
17. Students are allowed to video tape in the inventions contest area as long as it is with a video camera and not with an Internet or Bluetooth accessible device. (i.e. cell phone)
18. Students in violation of any rule or caught using communications devices may be disqualified and asked to leave the competition.