



## **2012 U.S. National Robotics Championship**

### **Round Up – All Divisions**

(One award will be given to teams across both Divisions)

Design Award  
Sportsmanship Award  
Educate Award  
Energy Award

### **Round Up – High School Division**

Amaze Award  
Build Award  
Excellence Award  
Programming Skills Champion Award  
Programming Skills 2<sup>nd</sup> Place Award  
Robot Skills Champion Award  
Robot Skills 2<sup>nd</sup> Place Award  
Think Award  
Tournament Champion Award  
Tournament Finalist Award

### **Round Up – Middle School Division**

Amaze Award  
Build Award  
Excellence Award  
Programming Skills Champion Award  
Robot Skills Champion Award  
Think Award  
Tournament Champion Award  
Tournament Finalist Award

See the following pages for award descriptions and special instructions.



## 2012 U.S. National Robotics Championship



**Amaze Award** - The “Amaze” award will be presented to a team that has built a competition robot that clearly demonstrates overall quality. Solid mechanical design along with demonstrated robot strength, programming, robustness, performance and consistency are key attributes assessed for this award.

**Build Award** - The “Build” award will be given to a team that has built an impressive machine, with attention to features and safety. Judges will look for beautifully crafted and constructed robots that also show a clear dedication to safety and attention to detail. These robots will have a professional feel and quality look to them, with clear attention to quality in construction.

**Design Award** - The “Design” award is presented to a team that demonstrates an organized and professional approach to the design process, project management, time management and team organization. The winning team will be able to describe how they created and implemented an efficient and productive design process to effectively manage their time and resources to accomplish their project goals. One of the main missions of the CREATE is to help students acquire real world life skills that will benefit them in their academic and professional future. The Engineering Notebook is a way for teams to document how the VEX Robotics Competition experience has helped them to better understand the engineering design process while also practicing a variety of critical life skills including project management, time management, brainstorming and teamwork. Engineering is an iterative process requiring students to recognize and define a problem, brainstorm and work through various stages of the design process, test their designs, continue to improve their designs and continue the process until a solution has been produced. During this process students will come across obstacles, will encounter instances of success and failure, and will learn many lessons through their experience. It is this process that students should document in their Engineering Notebook. The Engineering Notebook is an opportunity to document everything a team does and can serve as a historical guide of lessons learned and best practices which can benefit the team and students in future years. Students may document any number of things in their Engineering Notebook such as: team meeting notes, design concepts and sketches, pictures, notes from competitions, biographies of the members of their team (students, teachers and mentors), observations and thoughts of team members throughout the season, team organization practices and any other notes that a team finds useful. Creating and maintaining an Engineering Notebook is in no way “required or mandated” for teams participating in the VEX Robotics Competition. There are no mandatory rules for this notebook if you do choose to have one to show at events - it is a document created by the team, for the team and can be customized in whatever way works best for your team. While not required, maintaining an Engineering Notebook is highly recommended and can have many benefits for the team, but when and how to maintain such a notebook is completely optional and up to each team. There is only one award given at the VEX U.S. National Robotics Championship which requires that teams present their Engineering Notebook to the judges - the Design Award. Having an Engineering Notebook will be one criteria used in judging the Excellence Award. We still encourage any teams that create an Engineering Notebook to bring it to events and keep it in their pit area and take to the judges interview to show and discuss with Judges. Judges are always interested in learning and seeing the various skills students acquire and demonstrate through their participation in the VEX Robotics Competition. Teams are welcome to bring support materials, flyers, team promotional materials and items such as an Engineering Notebook to events to share with judges.

Key Criteria:

- 1) Engineering Notebook is a clear, complete document of the team’s design and build process
- 2) Team is able to explain their design and strategy throughout the season
- 3) Team demonstrates personnel, time and resource management throughout the season
- 4) Teamwork and interview quality

**Energy Award** - The “Energy” award will be decided based on team enthusiasm at the event. The winning team will demonstrate enthusiasm throughout the competition – in the pit area, on the field, in the audience, when their robot is playing and when it’s not. This award will be judged and decided by the volunteers and staff at the event.

**Excellence Award** - This is the highest award presented in the VEX Robotics Competition. The recipient of this award is a team that exemplifies overall excellence in building a well-rounded VEX robotics program. This team excels in many areas and is a shining example of dedication, devotion, hard work and teamwork. A strong contender in numerous award categories, this team deserves to be recognized for their accomplishments building a robot and in building a “team” committed to quality in everything they do. Teams are given points towards the Excellence Award in the following categories:

- Tournament Qualification Round Ranking
- Programming Skills Challenge Ranking
- Robot Skills Challenge Ranking
- Elimination Results
- Judged performance in all other award categories

Using this wide range of criteria, the Excellence Award will be presented to the team who excels in all areas of VEX Robotics.

**Judges Award** - For a team the judges decide is deserving of special recognition. Judges consider a number of possible criteria for this award such as team displays of special attributes, exemplary effort and perseverance at the event, team accomplishments or endeavors communicated to the judges that may not fall under existing awards, but deserve recognition.

**Programming Skills Champion** - Presented to the # 1 ranked team in the VEX Robotics Competition Programming Skills Challenge.

**Programming Skills 2<sup>nd</sup> Place** - Presented to the # 2 ranked team in the VEX Robotics Competition Programming Skills Challenge.

**Robot Skills Champion** - Presented to the # 1 ranked team in the VEX Robotics Competition Robot Skills Challenge.

**Robot Skills 2<sup>nd</sup> Place** - Presented to the # 2 ranked team in the VEX Robotics Competition Robot Skills Challenge.

**Sportsmanship Award** - The “Sportsmanship” award will be presented to a team that has earned the respect and admiration of the volunteers and other teams at the event. This team is a model for all to follow and interacts with everyone in a positive, respectful and polite manner. This award is judged during the event by teams, referees and volunteers.

**Educate Award** - The “Educate” award is given to a team that has been able to successfully integrate VEX Robotics into their Science, Technology, Engineering and Math (STEM) curriculum's. The winning team will demonstrate to the judges that VEX Robotics is not just an extracurricular activity, but a valuable tool used in their school to teach across many subjects in the classroom.

**Think Award** - The “Think” award will be presented to a team that has successfully utilized autonomous programming modes during competition. Quality, consistency and success of autonomous programs as well as the ability of the students to explain the programming process will help to determine a winner of this award. This award may be judged by the referees, programming inspectors and/or members of the judge panel.

**Tournament Champion** - Presented to the winning alliance of the VEX Robotics Competition tournament.

**Tournament Finalists** - Presented to the runner-up alliance of the VEX Robotics Competition tournament.