

AWARD DESCRIPTIONS

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Awards

Inspire Award

The Inspire Award celebrates a team that, in the opinion of the judges, is a strong contender in many award categories. The reliability of the robot during the robot competition is one aspect of this award, but it does not carry more weight than any requirement.

This judged award is given to the team that embodied the ‘challenge’ of the FIRST® Tech Challenge program. The team that receives this award is a strong ambassador for FIRST® programs and a role model FIRST® Team. This team is a top contender for many other judged awards and is a gracious competitor. The Inspire Award winner is an inspiration to other teams, acting with Gracious Professionalism® both on and off the playing field. This team shares their experiences, enthusiasm and knowledge with other teams, sponsors, their community and the judges. Working as a unit, this team will have showed success in performing the task of designing and building a robot.

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST® Tech Challenge event.
- Team is a strong contender for several other judged awards. The Inspire Award celebrates the strongest qualities of all the judged awards.
- The Team is an ambassador for FIRST® programs. They demonstrate and document their work in their community.
- Team is positive and inclusive, and each team member contributes to the success of the team. Team must submit an Engineering Notebook. The Engineering Notebook must include an Engineering section, a Team section and a Business or Strategic Plan. The entire Engineering Notebook must be high quality, thoughtful, thorough, detailed and well organised.
- Robot design is creative and innovative, and the robot performs reliably on the field. Team communicates clearly about their robot design and strategy to the judges.
- Team presentation is professional and engaging.

Think Award

Removing engineering obstacles through creative thinking.

This judged award is given to the team that best reflects the journey the team took as they experienced the engineering design process during the build season. The Engineering section of the notebook is the key reference for judges to help identify the most deserving Team. The team’s Engineering section must focus on the design and build stage of the team’s robot. Journal entries must include descriptions of the underlying science and mathematics of the robot design and game strategies, the designs, redesigns, successes, and opportunities for improvement. A team is not a

candidate for this award if they have not completed the Engineering section of the Engineering Notebook.

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST® Tech Challenge event.
- Team must submit an Engineering Notebook. The Engineering Notebook must have an Engineering section that includes entries describing underlying science, mathematics and game strategies.
- The Engineering Notebook must show that the team has a clear understanding of the engineering design process, with pictures or drawings and details documenting all stages of robot design.
- Notebook must recount the team’s journey, experience and lessons learned throughout the season.
- Engineering Notebook must be organised and follow the formatting guidelines provided by FIRST® and include a summary page.

Connect Award

Connecting the dots between community, FIRST®, and the diversity of the engineering world.

This judged award is given to the team that most connects with their local science, technology, engineering and math (STEM) community. A true FIRST® team is more than a sum of its parts, and recognises that engaging their local STEM community plays an essential part in their success. The recipient of this award is recognised for helping the community understand FIRST®, the FIRST® Tech Challenge, and the team itself. The team that wins the Connect Award aggressively seeks and recruits engineers and explores the opportunities available in the world of engineering, science and technology. This team has a clear Business or Strategic Plan and has identified steps to achieve their goals.

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST® Tech Challenge event.
- Team must submit an Engineering Notebook. The Engineering Notebook must include a Business or Strategic plan that identifies their future goals and the steps they will take to reach those goals. The plan could include fundraising goals, sustainability goals, timelines, outreach and community service goals.
- Team provides clear examples of developing in person or virtual connections with individuals in the engineering, science, or technology community.
- Team actively engages with the engineering community to help them understand FIRST®, the FIRST® Tech Challenge, and the team itself.

Rockwell Collins Innovate Award

Bringing great ideas from concept to reality.

The Rockwell Collins Innovate Award celebrates a team that thinks outside the box, and has the ingenuity and inventiveness to make their designs come to life. This judged award is given to the team that has the most innovative and creative Robot design solution to any specific components in the FIRST® Tech Challenge game. Elements of this award include elegant design, robustness, and ‘out of the box’ thinking related to design. This award may address the design of the whole robot, or of a sub-assembly attached to the robot. The creative component must work consistently, but a robot does not have to work all the time during matches to be considered for this award. The team’s Engineering Notebook must include journal entries to show the design of the component or components and the team’s robot to be eligible for this award. Entries must describe how the team arrived at their solution.

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST® Tech Challenge event.
- Team must submit an Engineering Notebook. The Engineering Notebook must include an Engineering section that documents the design process and how the team arrived at their design solution.
- Robot or robot sub-assembly must be elegant and unique in its design.
- Creative component must be stable, robust and work reliably.
- Robot design is efficient and consistent with team plan and strategy.

Design Award

Industrial design at its best.

This judged award recognises design elements of the robot that are both functional and aesthetic. The Design Award is presented to teams that incorporate industrial design elements into their solution. These design elements could simplify the robot’s appearance by giving it a clean look, be decorative in nature, or otherwise express the creativity of the team. The winning design should not compromise the practical operation of the Robot but complement its purpose.

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST® Tech Challenge event.
- Team must submit an Engineering Notebook with an Engineering section that includes detailed robot design drawings.
- Team demonstrates industrial design principles, striking a balance between form, function and aesthetics.
- Robot distinguishes itself from others by its aesthetic and functional design.
- Basis for the design is well considered (that is inspiration, function, etc.).

Motivate Award

Sparking others to embrace the culture of FIRST®!

This team embraces the culture of FIRST® and clearly shows what it means to be a team. This judged award celebrates the team that represents the essence of the FIRST® Tech Challenge competition through team building, team spirit and displayed enthusiasm. This is a team who makes a collective effort to make FIRST® known throughout their school and community, and sparks others to embrace the culture of FIRST®.

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST® Tech Challenge event.
- Team must submit an Engineering Notebook. The Engineering Notebook must include a Business or Strategic plan that identifies their future goals and the steps they will take to reach those goals. The plan could include fundraising goals, sustainability goals, timelines, outreach and community service goals.
- The team is an ambassador for FIRST® programs.
- Team can clearly show the successful recruitment of new teams, mentors, coaches and volunteers who were not already active within the STEM community.
- Team can explain the individual contributions of each Team member, and how these apply to the overall success of the Team.

Strongly suggested criteria for the Motivate Award:

- All Team members take part in their presentation, and actively engage with the judges.
- Team shows a creative approach to materials that market their team and FIRST®.

Control Award

Mastering Robot intelligence.

The Control Award celebrates a team that uses sensors and software to increase the robot's functionality on the field. This award is given to the team that demonstrates innovative thinking in the control system to solve game challenges such as autonomous operation, improving mechanical systems with intelligent control, or using sensors to achieve better results on the field. The control component should work consistently on the field. The team's Engineering Notebook must contain details about the implementation of the software, sensors and mechanical control.

- Team shows respect and Gracious Professionalism® to everyone they meet at a FIRST® Tech Challenge event.
- Team must apply for the Control Award by filling out the Control Award Content Sheet, located in Appendix D of the Game Manual Part 1.
- The team must submit an Engineering Notebook. The Engineering Notebook must include an Engineering section that documents the control components.
- Control components must enhance the functionality of the robot on the playing field.

Strongly suggested criteria for the Control Award:

- Advanced software techniques and algorithms are encouraged.
- Control components should work reliably.

Judges Award

Your Judge Advisor will have information about the Judging for this award. During the competition, the judging panel may meet a team whose unique efforts, performance or dynamics merit recognition, but doesn't fit into any of the existing award categories. To recognise these unique teams, FIRST® offers a customisable Judges Award. The judging panel may select a team to be honored, as well as the name of the Judges' Award. The Judges Award recognises a team for their outstanding efforts, but does not factor into the Advancement Criteria.

Winning Alliance Award

This award will be given to the winning Alliance represented in the final match.

Finalist Alliance Award

This award will be given to the finalist Alliance represented in the final match.