

Updated 01/02/2018

2017-2018 Award Descriptions

Award and Description

Criteria

Inspire Award

This judged award is given to the team that truly 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 Tech Challenge 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 is able to communicate their experiences, enthusiasm and knowledge to other teams, sponsors, their community, and the Judges. Working as a unit, this team will have demonstrated success in accomplishing the task of designing and building a robot.

The winner of the Inspire Award at each tournament level has received an automatic invitation to the next tournament level. Once a team has won an Inspire Award at a Championship, they are no longer eligible to win the Inspire Award at additional championship tournaments they may attend. Similarly, once a team wins an Inspire Award at a Qualifying tournament or League Championship, they are no longer eligible to win the Inspire Award at subsequent Qualification tournaments or League Championships within the same region.

Required criteria for the Inspire Award:

Team must demonstrate respect and *Gracious Professionalism*® toward everyone they encounter at an *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 and demonstrates and documents their work in their community.

Team dynamic is positive and inclusive, and each team member contributes to the success of the team.

Engineering Notebook must be submitted, and 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 organized. 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.

Rockwell Collins Innovate Award

Bringing great ideas from concept to reality.

The Rockwell Collins Innovate Award celebrates a team that not only thinks outside the box, but also 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 or all specific field elements or 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 should be marked with journal entries to show the design of the component(s) and the team's robot in order to be eligible for this award, and entries should describe succinctly how the team arrived at that solution.

Required criteria for the Rockwell Collins Innovate Award:

Team must demonstrate respect and *Gracious Professionalism®* towards everyone they encounter at an *FIRST* Tech Challenge event.

Team must submit an Engineering Notebook with 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.

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PTC Design Award

Industrial design at its best.

This judged award recognizes design elements of the robot that are both functional and aesthetic. All successful robots have innovative design aspects; however, the PTC 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 robots but complement its purpose. This award is sponsored by Parametric Technology Corporation (PTC), developers of the CAD tools, Creo and Mathcad. PTC gives licenses to the *FIRST* Tech Challenge student teams for these software products to help them with their designs.

Required criteria for the PTC Design Award:

- Team must demonstrate respect and Gracious Professionalism® toward everyone they encounter at an 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 differentiates itself from others by its aesthetic and functional design.
- Basis for the design is well considered (i.e. inspiration, function, etc.).
- Use of PTC's Creo is not required to be eligible; however teams that use them in their design are given extra consideration for this award.

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 STEM community. A true FIRST team is more than a sum of its parts, and recognizes that engaging their local STEM community plays an essential part in their success. The recipient of this award is recognized for helping the community understand FIRST, the FIRST Tech Challenge, and the team itself. The team that wins the Connect Award aggressively seeks 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.

Required criteria for the Connect Award:

- Team must demonstrate respect and Gracious Professionalism[®] toward everyone they encounter at an FIRST Tech Challenge event.
- An Engineering Notebook must be submitted and 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 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.

Award and Description Criteria Motivate Award Required criteria for the Motivate Award: More than Robots! Team must demonstrate respect and Gracious This judged award celebrates the team that exemplifies the Professionalism® toward everyone they encounter at an FIRST Tech Challenge event. essence of the FIRST Tech Challenge competition through team The Team is an ambassador for *FIRST* programs. building, team spirit and exhibited enthusiasm. This team Team can clearly demonstrate the successful embraces the culture of FIRST and clearly demonstrates what it recruitment of new teams, mentors, coaches and means to be a team. This is a team who makes a collective effort volunteers who are not otherwise active within to make FIRST known throughout their school and community, the STEM community. and sparks others to embrace the culture of FIRST. Team can articulate the individual contributions of each team member, and how these attribute to the overall success of the Team. Strongly suggested criteria for the Motivate Award: All team members participate in their presentation, and actively engage with the judges. Team can show a creative approach to materials that market the team and FIRST. Think Award Required criteria for the Think Award: Removing engineering obstacles through creative thinking. Team must demonstrate respect and *Gracious* This judged award is given to the team that best reflects the *Professionalism*® toward everyone they encounter journey the team took as they experienced the engineering design at an FIRST Tech Challenge event. process during the build season. The Engineering Section of the **Engineering Notebook must demonstrate that the** notebook is the key reference for judges to help identify the most team has a clear understanding of the engineering deserving team. The team's Engineering Section should focus on design process, with pictures or drawings and the design and build stage of the team's robot. Journal entries details documenting all stages of robot design. should include those describing the underlying science and Notebook must recount the team's journey, mathematics of the robot design and game strategies, the experience and lessons learned throughout the designs, re-designs, successes, and those interesting moments season. when things weren't going as planned. A team is not a candidate **Engineering Notebook must include entries** for this award if they have not completed the Engineering Section describing underlying science, mathematics, and of the Engineering Notebook. game strategies. Strongly suggested criteria for the Think Award: Teams should tab/flag 6 to 8 pages of the Engineering Section to support entries on the summary page.

Engineering Notebook should be organized and follow the formatting guidelines provided by *FIRST* and include a Summary Page. Note: Teams should review the Engineering Notebook section of this manual for a complete description and format specifications.

Award and Description	Criteria
Control Award	
Mastering robot intelligence. The Control Award celebrates a team that uses sensors and software to enhance 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, enhancing 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 must demonstrate respect and Gracious Professionalism® toward everyone they encounter at an FIRST Tech Challenge event. Team must apply for the Control Award by filling out the Control Award Content Sheet, located in Game Manual Part I, Appendix 3. The Engineering Notebook must include an Engineering Section that documents the control components. Control Components must enhance the functionality of the robot on the field. Strongly suggested criteria for the Control Award Advanced software techniques and algorithms are encouraged.
	Control Components should work reliably.
Promote Award (Optional Award)	
	Required criteria for the Promote Award:
This judged award is optional and may not be given at all tournaments. Please contact your tournament director to determine if it will be given at an event you attend. The Promote Award is given to the team that is most successful in creating a compelling video message for the public designed to change our culture and celebrate science, technology, engineering and math. Teams must submit a one-minute long public service announcement (PSA) video based on the PSA subject for the season. PSA Subject for 2016 – 2017 Season: "This is how I plan to pay FIRST forward"	Video must meet the following criteria: Video cannot be longer than 60 seconds. Video must be of a high quality, as submissions may be used at a later time to promote FIRST. Team must have rights to music used in the video. Video must have strong production value. Video must be submitted by the designated deadline. Team must present a thoughtful and impactful video which appeals to the general public. Creativity in interpreting the annually assigned theme is required. See video award submission guidelines in the
	Game Manual Part I. PSA Subject is announced each year in the Game Manual Part I.

Award and Description	Criteria
Compass Award (Optional Award)	
A beacon and leader in the journey of <i>FIRST</i> Tech Challenge. An <i>FIRST</i> Tech Challenge team is about more than building robots and competing at tournaments. It is a journey to a destination through trial and error, success and failure, with challenging new technology and obstacles to navigate where no road maps are provided. How does a team find their way? The Compass Award recognizes an adult Coach or Mentor who has provided outstanding guidance and support for a team throughout the year, and demonstrates to the Team what it means to be a Gracious Professional. The winner of the Compass Award will be determined from candidates nominated by <i>FIRST</i> Tech Challenge team members, via a 40-60 second video submission, highlighting how their Mentor has helped them become an inspirational team. We want to hear what sets the Mentor apart.	Provided criteria for the Compass Award: Video must meet the following criteria: Video cannot be longer than 60 seconds. Video must be of a high quality, as submissions may be used at a later time to promote FIRST. Team must have rights to music used in the video. Video must be submitted by the designated deadline. Video highlights the mentor's contribution to the team and demonstrates what sets the mentor apart. See video award submission guidelines.
Judges Award (Optional Award) During the course of the competition, the judging panel may encounter a team whose unique efforts, performance or dynamics merit recognition, yet doesn't fit into any of the existing award categories. To recognize these unique teams, FIRST offers a customizable judges award. The judging panel may select a team to be honored, as well as the name of the judges' award. The Judges Award recognizes a team for their outstanding efforts, but does not factor into the Advancement Criteria.	
Winning Alliance Award Finalist Alliance Award	This Award will be given to the winning Alliance represented in the final match. This Award will be given to the finalist Alliance represented in the final match.