

Award Descriptions

Updated 10/10/22

Inspire Award

This judged award is given to the team that best embodies 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 shown success in performing the task of designing and building a robot.

Required Criteria for the Inspire Award:

- Team must show respect and *Gracious Professionalism*® to everyone they meet at a *FIRST* Tech Challenge event.
- Team must be a strong contender for several other judged awards. The Inspire Award celebrates the strongest qualities of all the judged awards.
 - Must be a contender for a Machine, Creativity, and Innovation Award.
 - Must be a contender for a Team Attributes Award.
 - Must be a contender for the Think Award.
- Team must be an ambassador for *FIRST* programs. They demonstrate and document their work in their community.
- Team must be positive and inclusive, and each team member contributes to the success of the team.
- Team must submit an engineering portfolio. The engineering portfolio must include engineering content, team information and a team plan. The entire engineering portfolio must be high quality, thoughtful, thorough, concise, and well-organized.
- Robot design must be creative and innovative, and the robot performs reliably on the field. The team communicates clearly about their robot design and strategy to the judges.
- Team interview session must be professional and engaging.

Strongly Suggested Criteria for the Inspire Award:

- The team should be able to share or provide more detailed information to support the information in the portfolio.
- The team should refer to the Award Definitions for judging outlined in Appendix F of Game Manual Part 1 for outreach and be able to provide supporting documentation to the judges, where applicable.

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 content within the portfolio is the key



reference for judges to help identify the most deserving team. The teams engineering content must focus on the design and build stage of the team's robot.

The team must be able to share or provide additional detailed information that is helpful for the judges. This could 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 their portfolio does not include engineering content.

Required Criteria for the Think Award:

- Team must show respect and *Gracious Professionalism*® to everyone they meet at a *FIRST* Tech Challenge event.
- Team must submit an engineering portfolio.
- Engineering portfolio must have engineering content. The engineering content could include entries describing examples of the underlying science, mathematics, and game strategies in a summary fashion.
- The engineering portfolio must provide examples that show the team has a clear understanding of the engineering design process including an example of lessons learned.

Strongly Suggested Criteria for the Think Award:

- Team must be able to describe or provide additional information to the judges about their portfolio content.
- Engineering portfolio could summarize how the team acquired new mentors or acquired new knowledge and expertise from their mentors.
- Engineering portfolio could contain summary of overall team plan.
- Engineering portfolio could contain information about the plans to develop skills for team members.
- Portfolio format is less important but enables the judges to understand the team's design maturity, organizational capabilities, and overall team structure.
- Portfolio could reference specific experiences and lessons learned but should capture the summary of the status of the team and their robot design.
- Portfolio could also summarize experiences and lessons learned from outreach with concise tables of outcomes.
- The team should refer to the Award Definitions for judging outlined in Appendix F of Game Manual Part 1 for outreach and be able to provide supporting documentation to the judges, where applicable.

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 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 actively seeks and recruits engineers and explores the opportunities available in the world of engineering, science, and technology. This team has a clear team plan and has identified steps to achieve their goals.

Required Criteria for the Connect Award:

- Team must show respect and *Gracious Professionalism*® to everyone they meet at a *FIRST* Tech Challenge event.
- Team must submit an engineering portfolio.
- Portfolio must include a team plan that covers the team's goals for the development of team member skills, and the steps the team has taken or will take to reach those goals.
 - Examples of what the plan could include are:
 - Timelines
 - Outreach to science, engineering, and math communities
 - Training courses.
- Portfolio must include a summary of how the team acquired new mentors or acquired new knowledge and expertise from a mentor. Working with mentors from *FIRST*'s Mentor Matching site is an acceptable way to learn from mentors.

Strongly Suggested Criteria for the Connect Award:

- 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.
- The team should refer to the Award Definitions for judging outlined in Appendix F of Game Manual Part 1 for outreach and be able to provide supporting documentation to the judges, where applicable.

Innovate Award sponsored by Raytheon Technologies

Bringing great ideas from concept to reality.

The Innovate Award celebrates a team that thinks imaginatively and has the ingenuity, creativity, and inventiveness to make their designs come to life. This judged award is given to the team that has an 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 portfolio must include a summary of 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.

Required Criteria for the Innovate Award sponsored by Raytheon Technologies:

- Team must show respect and *Gracious Professionalism*® to everyone they meet at a *FIRST* Tech Challenge event.
- Team must submit an engineering portfolio.
- The engineering portfolio must include examples of the team's engineering content that illustrate how the team arrived at their design solution.



- Robot or robot sub-assembly must be creative, elegant, and unique in its design.
- Creative component must be stable, robust, and work reliably most of the time.

Strongly Suggested Criteria for the Innovate Award sponsored by Raytheon Technologies:

- The portfolio could inspire the judges to ask the team about the specific detailed engineering information.

Control Award sponsored by Arm:

Mastering Robot intelligence.

The Control Award celebrates a team that uses sensors and software to increase the robot's functionality in the field. This award is given to the team that demonstrates innovative thinking to solve game challenges such as autonomous operation, improving mechanical systems with intelligent control, or using sensors to achieve better results. The control component should work consistently in the field. The team's engineering portfolio must contain a summary of the software, sensors, and mechanical control, but would not include copies of the code itself.

Required Criteria for the Control Award, sponsored by Arm:

- Team must show 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 Submission Form, located in Appendix E of Game Manual Part 2.
 - The Control Award Submission Form must not exceed 2 pages.
- The Team must submit an engineering portfolio. The engineering portfolio must include engineering content 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, sponsored by Arm:

- Advanced software techniques and algorithms are encouraged, but not required.
- Control components should work reliably.
- Learnings from the team about what they tried and what did not work with regards to sensors, hardware, algorithms, and code could be included in the engineering portfolio.

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 *Gracious Professionalism*® and general enthusiasm for the overall philosophy of *FIRST* and what it means to be a *FIRST* Tech Challenge team. 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*.

Required Criteria for the Motivate Award:

- Team must show respect and *Gracious Professionalism*® to everyone they meet at a *FIRST* Tech Challenge event.

- Team must submit an engineering portfolio. The engineering portfolio must include a Team Organization Plan, which could describe their future goals and the steps they will take to reach those goals.
 - Examples of what the plan could include are:
 - Team identity
 - Fund-raising goals
 - Sustainability goals
 - Timelines
 - Outreach
 - Finances
 - Community service goals.
- The team must be an ambassador for *FIRST* programs.
- Team must be able to 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:

- Team takes part in their presentation, and actively engages with the judges.
- Team shows a creative approach to materials that market their team and *FIRST*.
- Team can clearly show the successful recruitment of people who were not already active within the STEM community.
- Team could also summarize experiences and lessons learned from outreach.
- The team should refer to the Award Definitions for judging outlined in Appendix F of Game Manual Part 1 for outreach and be able to provide supporting documentation to the judges, where applicable.

Design Award

Industrial design at its best.

This judged award recognizes 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 robot should be durable, efficiently designed, and effectively address the game challenge.

Required Criteria for the Design Award:

- Team must show respect and *Gracious Professionalism*® to everyone they meet at a *FIRST* Tech Challenge event.
- Team must submit an engineering portfolio with engineering content. This could be CAD images or robot drawings of the team's overall design and/or components.
- Team must document and implement strong industrial design principles, striking a balance between form, function, and aesthetics.

Strongly Suggested Criteria for the Design Award:

- Distinguishes itself from others by its aesthetic and functional design.
- Basis for the design is well considered (that is inspiration, function, etc.).



- Design is effective and consistent with team plan and strategy.
- The portfolio could inspire the judges to ask the team about specific detailed engineering information.

Promote Award (Optional)

This judged award is optional and may not be given at all tournaments.

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. Team may win the Promote Award only once at a Championship level event and only once at a qualifying tournament or league tournament level event.

PSA Subject for 2022-2023 season: **“How I learned about *FIRST*”**

Required criteria for the Promote Award:

- Video must follow *FIRST* branding and design standards.
- Video cannot be longer than 60 seconds.
- Video must be of a high quality, as submissions may be used later to promote *FIRST*.
- Team must have rights to the music used in the video.
- Music and permissions must be listed in video credits.
- Video must have strong production value.
- Video must be submitted by the deadline given by the tournament director.
- Team must present a thoughtful and impactful video which appeals to the public.
- Creativity in interpreting the yearly theme is required.
- Follow video award submission guidelines.

Compass Award (Optional)

A beacon and leader in the journey of the *FIRST* Tech Challenge.

This judged award is optional and may not be given at all tournaments. The Compass Award recognizes an adult coach or mentor who has given outstanding guidance and support to 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 chosen from candidates nominated by *FIRST* Tech Challenge student team members, via a 40-60 second video submission. The video must highlight how their mentor has helped them become an inspirational team. We want to hear what sets the mentor apart.

Required criteria for the Compass Award:

- Video must follow *FIRST* branding and design standards.
- Video cannot be longer than 60 seconds.
- Video must be of a high quality, as submissions may be used later to promote *FIRST*.
- Team must have permission from the copyright owners for the music used in the video.



- Music and permissions must be listed in video credits.
- Video must be submitted by the deadline given by the tournament director.
- Video highlights the mentor's contribution to the team and demonstrates what sets the mentor apart.

Judges' Choice Award

This award is optional and may not be given at all tournaments. During the competition, the judging panel may meet a team whose unique efforts, performance, or dynamics merit recognition, but does not fit into any of the existing award categories. To recognize these unique team, *FIRST* offers a customizable Judges Choice Award. The judging panel may select a team to be honored, as well as the name of the Judges Choice Award. The Judges Choice Award recognizes 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.