1 Introduction

1.1 About *FIRST*®

FIRST® (For Inspiration and Recognition of Science and Technology) was founded by inventor Dean Kamen to inspire young people's interest in science and technology. As a robotics community that prepares young people for the future, *FIRST* is the world's leading youth-serving nonprofit advancing STEM education. For 30 years, *FIRST* has combined the rigor of STEM learning with the fun and excitement of traditional sports and the inspiration that comes from community through programs that have a proven impact on learning, interest, and skill-building inside and outside of the classroom. *FIRST* provides programs that span a variety of age groups:

- *FIRST*® Robotics Competition for grades 9-12, suggested ages 14-18
- *FIRST*® Tech Challenge for grades 7-12, suggested ages 12-18
- *FIRST*® LEGO® League for grades Pre-K-8, ages 4-16
  - *FIRST*® LEGO® League Challenge for grades 4-8 (ages 9-16, ages vary by country)
  - *FIRST*® LEGO® League Explore for grades 2-4 (ages 6-10)
  - *FIRST*® LEGO® League Discover for grades Pre-K-1 (ages 4-6)

Please visit the *FIRST* website for more information about *FIRST* and its programs.

Purpose	Vision	Mission
FIRST exists to prepare the young people of today for the world of tomorrow.	To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders.	The mission of *FIRST* is to provide life-changing robotics programs that give young people the skills, confidence, and resilience to build a better world.

1.2 *FIRST*® Tech Challenge

FIRST Tech Challenge is a student-centered program that focuses on giving young people a unique and stimulating experience. Every September, at an event known as "Kickoff", a new game challenge is introduced. Once the challenge is released, small teams of students with the help of mentors design, build, test, and program robots that must perform a series of game tasks autonomously and under driver control. These teams then put their skills to the test in a series of tournaments which combine the excitement of a competitive sport while encouraging students to help and learn from one another.

Participants and alumni of *FIRST* programs gain access to education and career discovery opportunities, connections to exclusive scholarships and employers, and a place in the *FIRST* community for life. To learn more about *FIRST*® Tech Challenge and other *FIRST*® Programs, visit www.firstinspires.org.

1.3 *FIRST* Ethos and Core Values

1.3.1 Core Values

The *FIRST* Core Values are fundamental to *FIRST* and unique to its programs. They emphasize friendly sportsmanship, respect for the contributions of others, teamwork, learning, and community involvement and are part of our commitment to fostering, cultivating, and preserving a culture of unity.

Our community expresses the *FIRST* philosophies of Gracious Professionalism® and Coopertition® through the *FIRST* Core Values.

Discovery: We explore new skills and ideas.

Innovation: We use creativity and persistence to solve problems.

Impact: We apply what we learn to improve our world.

Inclusion: We respect each other and embrace our differences.

Teamwork: We are stronger when we work together.

Fun: We enjoy and celebrate what we do!

1.3.2 Gracious Professionalism®, a *FIRST* Credo

Gracious Professionalism® is part of the ethos of *FIRST*. It's a way of doing things that encourages high quality work, emphasizes the value of others, and respects individuals and the community. *Gracious Professionalism* is not clearly defined for a reason. It is an aspirational ideal to always strive towards, not a goal to be achieved or a method of measuring someone, and for this reason, you can never say someone "is" or "is not" being Graciously Professional. We should each work to better embody Gracious Professionalism in all our actions. How we pursue this can and should mean different things to everyone.

Some possible meanings of *Gracious Professionalism* include:

- gracious attitudes and behaviors are win-win,
- gracious folks respect others and let that respect show in their actions,
- professionals possess special knowledge and are trusted by society to use that knowledge responsibly, and
- gracious professionals make a valued contribution in a manner pleasing to others and to themselves.

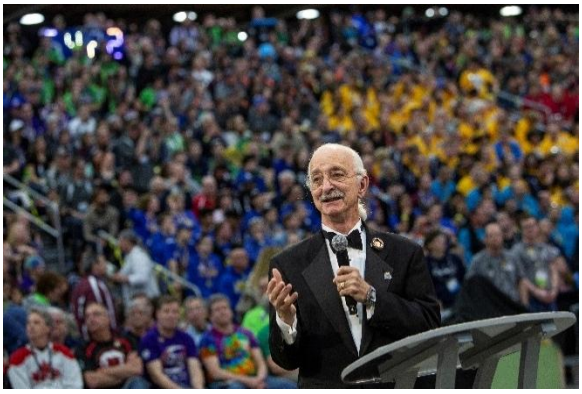
In the context of *FIRST*, this means that all teams and participants should:

- learn to be strong competitors, but also treat one another with respect and kindness in the process and
- avoid leaving anyone feeling as if they are excluded or unappreciated.

Knowledge, pride, and empathy should be comfortably and genuinely blended.

In the end, *Gracious Professionalism* is part of pursuing a meaningful life. When professionals use knowledge in a gracious manner and individuals act with integrity and sensitivity, everyone wins and society benefits.

Figure 1-1: Dr. Woodie Flowers, Gracious Professionalism advocate and exemplar



"The FIRST spirit encourages doing high-quality, well-informed work in a manner that leaves everyone feeling valued. Gracious Professionalism seems to be a good descriptor for part of the ethos of FIRST. It is part of what makes FIRST different and wonderful."

- Dr. Woodie Flowers, (1943 – 2019)
Distinguished Advisor to FIRST

It is a good idea to spend time going over this concept with your team and reinforcing it regularly. We recommend providing your team with real-life examples of *Gracious Professionalism* in practice, such as when a team loans valuable materials or expertise to another team that they will later face as an opponent in competition. Routinely highlight opportunities to display *Gracious Professionalism* at events and encourage team members to suggest ways in which they can demonstrate this quality themselves and through outreach activities.

1.3.3 Coopertition®

At *FIRST*, *Coopertition*® is displaying unqualified kindness and respect in the face of fierce competition. *Coopertition* is founded on the concept and philosophy that teams can and should help and cooperate with one another even as they compete. *Coopertition* involves learning from teammates and mentors. *Coopertition* means competing always but assisting and enabling others when you can.

1.4 Spirit of Volunteering

FIRST can only hope to achieve our mission of providing life-changing robotics programs that give young people the skills, confidence, and resilience to build a better world with your help.

There are two phrases which drive and motivate the individuals that volunteer their time for *FIRST*: "Giving Back" and "Pay It Forward." Each year, you have the extraordinary opportunity to help create the best-ever experience for our fellow volunteers, mentors, and students by becoming a *FIRST* volunteer.

To our team members and mentors: remember that the volunteers you interact with are dedicating their most precious asset - their time - to ensure that all teams have a fulfilling, fun, and memorable competition. Volunteers are the lifeblood of *FIRST*, and without them, *FIRST* would not be where it is today. We urge you to remember that *Gracious Professionalism* is part of the ethos of *FIRST*. It's a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community.

We strive to train each volunteer to always exhibit Gracious Professionalism - we hope we can work together to create an environment where all feel safe and welcome.

Please consider volunteering at local events near you but know that not all applicants can be placed in all roles at any given event. Please work with your volunteer coordinator and local Program Delivery Partner (PDP) to help identify the most meaningful way you can help in your region. A complete set of all role-specific volunteer materials can be found on our Volunteer Resources Page.

1.5 Accessibility and Inclusion

FIRST is committed to *STEM for Everyone™* and as such, *FIRST* makes reasonable accommodations for persons with disabilities who need and request accommodations. If a participant needs accommodation for an event, please contact your local leadership before the event so they can help ensure the accommodation is provided. Local leadership may make exceptions to rules to allow for reasonable accommodation given the exceptions do not create an undue hardship or cause safety concerns.

1.6 This Document & Its Conventions

The 2025-2026 Competition Manual is a resource for all *FIRST* Tech Challenge teams for information specific to the 2025-2026 season and the DECODE™ presented by RTX game. Its audience will find the following details:

- a general overview of the DECODE game,
- detail about the DECODE playing FIELD,
- a description of how to play the DECODE game,
- rules (related to safety, conduct, gameplay, inspection, event, etc.),
- ROBOT construction rules, and
- a description of how teams advance at 2025-2026 tournaments and throughout the season.

The intent of this manual is that the text means exactly, and only, what it says. Please avoid interpreting the text based on assumptions about intent, implementation of past rules, or how a situation might be in “real life.” There are no hidden requirements or restrictions. If you’ve read the entire manual, you already know everything needed for your journey.

Specific methods are used throughout this manual to highlight warnings, cautions, key words, and phrases. These conventions are used to alert the reader to important information and are intended to help teams in constructing a ROBOT that complies with the rules in a safe manner.

Links to other section headings and rule references within this manual appear in `blue underlined text with a grey background`. Links to external resources appear blue underlined text.

For linked references not included in a preview release of this document, the links will appear with the section letter and ### for the rules number within square brackets. For example, a cross link to a game rule before a game rule is released will appear as `[G###]` and will be replaced with the current linked rule when that section of the manual is released.

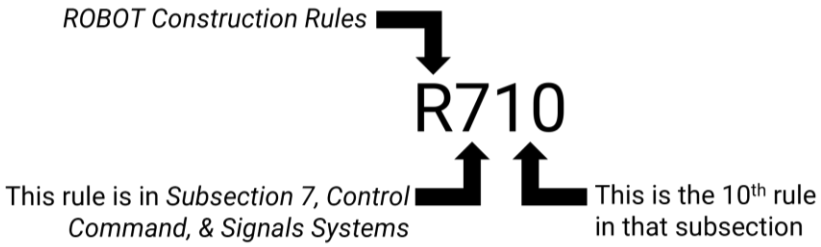
Key words that have a particular meaning within the context of *FIRST* Tech Challenge and DECODE are defined in section `16 Glossary` and indicated in ALL CAPS throughout this document.

The rule numbering method indicates the section, subsection, and position of the rule within that subsection. The letter indicates the section in which the rule is published.

- I for Section 3 Competition Eligibility and Inspection (I)
- E for Section 5 Event Rules (E)
- A for Section 6 Awards (A)
- G for Section 11 Game Rules (G)
- R for Section 12 ROBOT Construction Rules (R)
- T for Section 13 Tournament (T)
- L for Section 14 League Play Tournaments (L)
- C for Section 15 FIRST Championship (C)

The following digit(s) represents the subsection in which the rule can be found. The final digits indicate the rule's position within that subsection.

Figure 1-2 Rule numbering method



Warnings, cautions, and notes appear in orange boxes. Pay close attention to their contents as they're intended to provide insight into the reasoning behind a rule, helpful information on understanding or interpreting a rule, and/or possible "best practices" for use when implementing systems affected by a rule.

While orange boxes are part of the manual, they do not carry the weight of the actual rule (if there is an inadvertent conflict between a rule and its orange box, the rule supersedes the language in the orange box).

Imperial dimensions are followed by comparable metric dimensions in parentheses to provide metric users with the approximate size, mass, etc. Metric conversions (e.g., dimensions) round to the nearest 0.05 cm, e.g., "17.5 in. (~44.45 cm)." The metric conversions are offered for convenient reference only and do not overrule or take the place of the imperial dimensions presented in this manual and the official drawings (i.e., dimensions and rules will always defer to measurements using imperial units).

Rules include colloquial language, also called headlines, in an effort to convey an abbreviated version of the rule or rule set. There are two versions of headline formatting. Evergreen rules, rules which are expected to go relatively unchanged from season to season, are indicated with their headline presented in ***bold green text** with a leading asterisk. "Relatively unchanged" means that the overall intent and presence of the rule from season to season is constant, but game specific terms may be updated as needed (e.g., changing Pixels to Samples in a rule about what DRIVE COACHES may not contact during a MATCH). These rules also start their respective section, so their rule number is less likely to change from season to season. All other rule headlines use **bold orange text**. Any disagreement between the specific language used in the rules and the colloquial

language is an error, and the specific rule language is the ultimate authority. If you discover a disparity, please let us know at customerservice@firstinspires.org.

Team resources that are not generally season specific (for example, what to expect at an event, communication resources, team organization recommendations, and award descriptions) can be found on the *FIRST* Tech Challenge website.

1.7 Translations & Other Versions

The *FIRST* Tech Challenge Competition Manual is originally and officially written in English and is occasionally translated into other languages for the benefit of *FIRST* Tech Challenge teams whose native language may not be English. These assets are posted on the Game and Season Materials page.

A text-based English version can be provided only for use with assistive devices and not for redistribution. For more information, please contact *FIRST* Tech Challenge at customerservice@firstinspires.org.

Additional resources such as a *FIRST* Tech Challenge AI Chatbot are provided as a helpful tool, but the Competition Manual is the final authority. In the event that a rule or description is modified in an alternate version of this manual, the latest English PDF version as published on the Game and Season Materials page is the authoritative version.

1.8 Team Updates

Team Updates are used to notify the *FIRST* Tech Challenge community of revisions to the official season documentation (e.g., the manual, drawings) or important season news. Team Update posts are scheduled as follows:

- Every Thursday beginning on Kickoff day and ending two weeks prior to *FIRST* Championship.

Team Updates are posted on the Game and Season web page and are generally posted by 1pm Eastern.

Team Updates are indicated using the following formatting:

- Additions are highlighted in yellow. This is an example.
- Deletions are indicated with a strikethrough. ~~This is an example.~~

1.9 Question and Answer System

The Question and Answer System (Q&A) is a resource for teams to ask questions about gameplay, competition rules, judging and advancement, ROBOT build rules, and FIELD setup. Teams can search for previously asked questions and responses or pose new questions. Questions can include examples for clarity or reference multiple rules to understand the relationships and differences between them.

The Q&A opens on September 22, 2025, 12:00p.m. ET. Access to the Game Q&A forum is through the Lead Coach 1 or Lead Coach 2's account on the *FIRST* dashboard. Follow the instructions on how to create an official Q&A account. Teams may still create a separate view-only account to read the forum.

The Q&A may result in revisions to the text in the official manuals (which are communicated using the process described in section `1.8 Team Updates`).

Moderators will answer team questions beginning each Monday, and close on Thursday at 5:00pm ET. The responses in the Q&A do not supersede the text in the manual, although every effort will be made to eliminate

inconsistencies between the two. While responses provided in the Q&A may be used to aid discussion at each event, REFEREES and INSPECTORS are the ultimate authority on rules. If you have concerns about enforcement trends by volunteer authorities, please notify *FIRST*.

The Q&A is not a resource for firm predictions on how a situation will play out at an event. Questions about the following may not be addressed:

- rulings on vague situations
- challenging decisions made at past events
- design reviews of a ROBOT system for legality
- questions that are overly broad, vague, and/or include no rule references

Some examples of questions that may not be answered in the Q&A are:

- how should the REFEREE have ruled when this specific gameplay happened?
- duplicate questions
- questions clearly defined/addressed in this manual

Good questions ask generically about features of parts or designs, gameplay scenarios, or rules, and often reference one or more relevant rules within the question. Some examples of questions that will likely be answered in the Q&A are:

- A device we are considering using on the ROBOT comes with purple AWG 40 wire, does this comply with R?? and R??
- We're not sure how to interpret Rule G?? applies if blue ROBOT A does X and red ROBOT B does Y, can you please clarify?
- If a ROBOT does this specific action, is it doing what this defined term is describing?

Questions from "FTC 1000" represent content asked by key volunteers (e.g., REFEREES, INSPECTORS), answered by *FIRST*, and are considered relevant to teams.

