




FIRST
TECH
CHALLENGE

HOW IT WORKS

AGES

12-18

GRADES

7-12

We express the *FIRST* philosophies of *Gracious Professionalism*® and *Coopertition*® through *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!

FIRST® Tech Challenge encourages teams to design, build, program, and compete in thrilling robotics competitions. Guided by adult coaches and mentors, students develop STEM skills and practice engineering principles, while realizing the value of innovation, and teamwork. The robot kit is reusable from year-to-year and can be programmed using a variety of programming languages. Students are encouraged to create team brands and be an ambassador for *FIRST* and STEM in their communities.

WHAT IT OFFERS:

- Explore the creative problem-solving process within an intense, fun sports competition model
- Be part of an engaged and supportive community
- Design, build, and program robots
- Gain hands-on programming and rapid-prototyping experience
- Apply real-world math and science concepts
- Document the engineering process
- Develop problem-solving, organizational, and team-building skills
- Compete and cooperate in Alliances at tournaments
- Build life skills while building robots and work towards participating in tournaments and *FIRST* Championship
- Access to career discovery opportunities, networking, and the *FIRST* Scholarship Program
- Have fun!

GET STARTED:

- Up to 15 students per team
- At least 2 adult mentors/coaches per team
- Teams use a modular robotics platform, powered by Android technology, to design, build, and compete in a *FIRST*-designed game
- Includes schools, home schools, after-school groups, churches, civic organizations, neighborhood groups
- Exciting sports-like events with judges and awards
- Adaptable program that can be used in and out of the classroom

FIRSTINSPIRES.ORG/FTC



PROVEN, VERIFIABLE IMPACT!*



80% Express confidence in approaching problems in science and technology



98% Persevere despite challenges or barriers



84% Understand the role of *Gracious Professionalism*

SEASON OVERVIEW

MAY

Registration for the season opens

SEPTEMBER

Season Kickoff

OCTOBER-MARCH

Local and regional competitive events

APRIL

FIRST[®] Championship

FOR INFORMATION ABOUT *FIRST* IN YOUR AREA

www.firstinspires.org/about/contact-us



Project-based, hands-on *FIRST*[®] programs introduce students to engineering and coding in an engaging, inclusive, and creative classroom or after-school learning environment where students work collaboratively to solve an annual robotics challenge. Boosted by a million-strong global community of students, mentors, educators, volunteers, sponsors, and alumni in over 100 countries, our PreK-12 programs are designed to inspire innovation and equip young people to build a better future.



*FIRST, 2020 *FIRST* Tech Challenge End of Season Survey.

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