



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 students work together with their mentors to design and build robots to compete in a dynamic and exciting challenge released every September. Teams program classroom-scale robots to follow autonomous commands before student drivers take control in two-on-two matches. On and off the field, students develop STEM (science, technology, engineering, and math) skills, engage in community outreach, practice engineering innovation, and build confidence to help them succeed.

WHAT IT OFFERS:

- Design, build, and program robots using blocks-based or text-based coding and custom fabrication with 3D printing.
- Model a real-world engineering process.
- Apply math and science concepts.
- Develop strategic problem-solving, organizational, and team-building skills.
- Develop life skills, confidence, and resilience to build a better world.
- Compete at local and regional events, qualifying up to the *FIRST*® Championship. Earn awards based on teamwork, creativity, innovation, and the engineering design process.
- Gain access as participants and alumni to education and career discovery opportunities, connections to scholarships and employers, and a place in the *FIRST* community for life.
- Have fun as part of an engaged and supportive community.

GET STARTED:

- Recruit up to 15 students and at least two adult mentors/coaches per team.
- Meet in schools, after-school programs, home schools, community groups, generally twice a week for 9-12 weeks.
- Use a reusable control system, materials, and parts to design and build a robot to compete in a *FIRST*-designed annual game.
- Attend exciting, sports-like events to earn awards and build community.
- Adaptable program can be used in and out of the classroom with easy-to-implement technology for schools, robot-building resources, and *FIRST* professional development options.

"Everybody has to be able to participate in a future that they want to live for. That's what technology can do."

— DEAN KAMEN, FOUNDER, *FIRST*



**FIRST doesn't just work, it is the gold standard.
Proven impact on workplace skills***



87% confidence in approaching problems in science and technology



97% persevere despite challenges or barriers



98% accept input and feedback from others

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/find-local-support



FIRST® prepares young people for the future through a suite of life-changing youth robotics programs that build skills, confidence, and resilience. Because our programs are *More Than Robots®*, students build self-confidence and collaborative problem-solving skills as they conduct research, fundraise, design, build, and showcase their achievements. Founded as a nonprofit organization in 1989 by inventor Dean Kamen, FIRST is backed by a global network of mentors, educators, volunteers, sponsors, families, alumni, and program delivery partners.



*SOURCES: 2023 FIRST Tech Challenge end-of-season survey

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