

FIRST® is a global robotics community that prepares young people for the future.

FIRST LEGO LEAGUE



AGES 4-16* | **GRADES PreK-8**

Students engage in hands-on STEM experiences, building habits of learning, confidence, and teamwork skills along the way.

*Ages vary by country

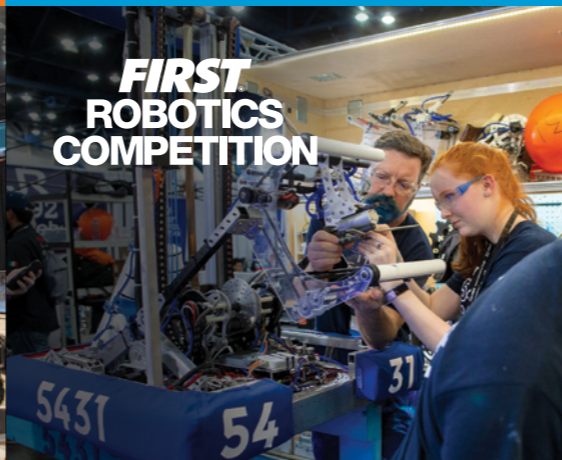
FIRST TECH CHALLENGE



AGES 12-18 | **GRADES 7-12**

Teams design, build, and program robots, develop strategy, and engage in thrilling, head-to-head competition.

FIRST ROBOTICS COMPETITION



AGES 14-18 | **GRADES 9-12**

Teams compete with 125-pound robots, combining the excitement of sport with the rigors of science and technology.

ABOUT FIRST®

FIRST® is the world's leading youth-serving nonprofit advancing STEM education. Through a suite of inclusive, team-based robotics programs for ages 4-18 and backed by a global network of mentors, coaches, volunteers, alumni, and sponsors, FIRST has a proven impact on learning, interest, and skill-building inside and outside of the classroom. For 30 years, students from all walks of life have developed self-confidence in STEM and valuable, real-world skills through FIRST that open pathways to a better future.



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WWW.FIRSTINSPIRES.ORG

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AGES
12-18

GRADES
7-12

ABOUT FIRST® TECH CHALLENGE

FIRST® Tech Challenge is designed for students who want to compete head to head using a sports model. Teams design, build, and program their robots to compete on a 12' X 12' field, in an alliance format, against other teams. Robots are built from a reusable platform, powered by Android technology, and programmed using Java-based programming languages. Teams, including students, coaches, and mentors, are required to develop strategy and build robots based on sound engineering principles, such as rapid prototyping. Awards are earned for the competition, as well as community outreach, robot design, and other real-world accomplishments.



FIRST Tech Challenge brings science, technology, engineering, and math (STEM) alive through a dynamic, hands-on approach to robotics. The program challenges students to apply STEM concepts in real-world situations and inspires tomorrow's innovators and entrepreneurs.

"FIRST Tech Challenge has allowed me to experience things I wouldn't have been able to elsewhere. Thank you so much for this program. It has rocked my world!"

— JOHN CHAPPELL, FIRST TECH CHALLENGE TEAM 4147

"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

STUDENTS GET TO

- Design, build, and program robots.
- Model a real-world engineering process.
- Apply math and science concepts.
- Develop strategic problem-solving, organizational, and team-building skills.
- Build life skills while building robots and work towards participating in regional tournaments and qualifying for World Championship.
- Compete and cooperate in alliances at tournaments.
- Access career discovery opportunities, networking, and the FIRST Scholarship Program, with \$80 million made available by ~200 providers.

HOW TO START A TEAM

- 1. Build Your Team** – We recommend a team size of about 10 students from your school and/or community.
- 2. Register Your Team** – Once you have gathered your team, visit our website to view cost, budgeting resources, and instructions on how to register your team. www.firstinspires.org/robotics/ftc
- 3. Enlist Additional Coaches and Mentors** – Every FIRST team is required to have two adult mentors/coaches who have passed the FIRST background screening process. www.firstinspires.org/youth-protection
- 4. Get Started** – Review the materials on our website and, if possible, attend events like a kick-off, workshops, and scrimmages. www.firstinspires.org/ftc-start-a-team



GET INVOLVED!

There are many ways you can get involved and volunteer to support a FIRST Tech Challenge team. Here are some examples of volunteer roles:

- Coach
- Mentor
- Event host/organizer
- Field Manager
- Referee
- Judge
- Inspector
- Scorekeeper

WWW.FIRSTINSPIRES.ORG/ROBOTICS/FTC