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

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

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

*Ages vary by country
ABOUT FIRST® ROBOTICS COMPETITION

First® Robotics Competition combines the excitement of sport with the rigors of science and technology. Under strict rules and limited time and resources, teams of high school students are challenged to build industrial-size robots to play a difficult field game in alliance with other teams, while they also fundraise to meet their goals, design a team “brand,” and advance respect and appreciation for STEM within the local community.

STUDENTS GET TO

• Develop design, project management, programming, teamwork, strategic thinking, and Cooperation® skills.
• Work alongside professional engineers.
• Build and compete with a robot of their own design.
• Learn and use sophisticated hardware and software.
• Access career discovery opportunities, networking, and the FIRST Scholarship Program, with $80 million made available by ~200 providers.

HOW TO START A TEAM

1. Form Your Team – There is no limit to the number of high school-aged students who can participate from your school and/or community.
2. Register Your Team and Review Resources – 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/frc
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 – Hold strategy meetings; hold trainings on building, programming, or other aspects of robot design; fundraise; and plan for the upcoming season. www.firstinspires.org/frc-start-a-team

— QUINN WAGNER, FIRST ROBOTICS COMPETITION TEAM 1533

“Thanks to the various positions I’ve held on the team, I’ve learned invaluable leadership skills that will help me in future jobs. The ability to work side by side with a mentor was a turning point for me.”

FIRST Robotics Competition is as close to real-world engineering as a student can get. It’s a sport where all participants may choose to become a professional.

— DEAN KAMEN, FOUNDER, FIRST

“It’s not just about robots. It’s about building self-confidence, respect, and important relationships with people who invent new technologies to make a better future.”

— DEAN KAMEN, FOUNDER, FIRST

GET INVOLVED!

There are many ways you can get involved and volunteer to support a FIRST Robotics Competition team. Here are some examples:

Individuals can:
• Mentor teams.
• Volunteer at events.
• Join planning committees that support FIRST activities.

Corporations, foundations, and administrations can:
• Sponsor teams.
• Donate space, materials, and talent.
• Fund FIRST events.

WWW.FIRSTINSPIRES.ORG/ROBOTICS/FRC