

FIRST® Where kids walk in and innovators walk out



FIRST LEGO LEAGUE JR.

Ages 6-10 (Grades K-4)

Introduces young children to science and coding concepts through hands-on, playful building challenges.

FIRST LEGO LEAGUE

Ages 9-16* (Grades 4-8)

Students program autonomous robots and design an innovative solution related to the annual theme.

*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 120-pound robots, combining the excitement of sport with the rigors of science and technology.

What is FIRST®?

FIRST® is the world's leading child-serving nonprofit advancing science, technology, engineering, and math (STEM). For 30 years, FIRST has been inspiring innovation and leadership by teaching STEM, teamwork, and problem-solving skills through engaging, hands-on robotics challenges developed to ignite curiosity and passion in students in grades K-12.



FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

200 Bedford Street ■ Manchester, NH 03101 ■ USA

www.firstinspires.org

FIRST®, the FIRST® logo, FIRST® Robotics Competition, FIRST® Tech Challenge, and Cooperitton® are trademarks of For Inspiration and Recognition of Science and Technology (FIRST). LEGO® is a registered trademark of the LEGO Group. FIRST® LEGO® League and FIRST® LEGO® League Jr. are jointly held trademarks of FIRST and the LEGO Group. All other trademarks are the property of their respective owners. ©2018 FIRST. All rights reserved. FR001



Ages 14-18 (Grades 9-12)

What is *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 also fundraising to meet their goals, designing a team “brand,” and advancing respect and appreciation for STEM within the local community.

— 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.

“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*

Students get to:

- Develop design, project management, programming, teamwork, strategic thinking, and *Coopertition*® skills.
- Work alongside professional engineers.
- Build and compete with a robot of their own design.
- Learn and use sophisticated hardware and software.
- Access exclusive scholarships from hundreds of colleges/universities.

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.
www.firstinspires.org/robotics/frc
- 2. Register Your Team and Review Resources** – Once you have gathered your team, visit our website to view cost, budgeting, 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



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