A GLOBAL ROBOTICS COMMUNITY PREPARING YOUNG PEOPLE FOR THE FUTURE

In 1989, inventor Dean Kamen founded FIRST® with an ambitious vision:

A global transformation. A world where STEM is celebrated. And a culture where young people can proudly dream of becoming true leaders in the fields of science and technology.

FIRST IS

OUR FUTURE: BUILT BETTER TOGETHER

A decade of verifiable data shows that exposing kids to fun, exciting *FIRST* programs builds holistic life skills and greatly increases their motivation to seek STEM-literate education and careers.

FIRST programs inspire kids to build self-confidence in STEM, meaningful connections, and skills to become leaders and innovators in any industry.

FIRST IS

COMMITTED TO CREATING A DIVERSE, INCLUSIVE, AND EQUITABLE COMMUNITY

FIRST believes STEM is for everyone. STEM engagement builds confidence in young people and opens doors to all kinds of career opportunities.

At *FIRST*, we are determined to bring our programs to the students who can benefit from them the most. We're constantly developing new strategies to create greater, more equitable access and to help every child succeed.

For more on our commitment to Equity, Diversity, and Inclusion, visit **www.firstinspires.org/diversity.**

FIRST IS

THE ONLY SPORT WHERE EVERY KID CAN TURN PRO

Through challenges designed to ignite curiosity and encourage exploration, *FIRST* offers a suite of team-based robotics programs for students aged 4-18, which they can join at any level.

FIRST is the world's leading youth-serving nonprofit advancing science, technology, engineering, and math (STEM), helping students build the skills they'll need for the future.

> "It was really empowering that I had a group of friends and mentors who were patient with me, and willing to show me how to build. I think I had been really intimidated by engineering, up until that point."
>
> — CASSIE HUDSON, *FIRST* ALUM + APPLICATIONS ENGINEER

FIRST STUDENTS AND ALUMNI ARE
WORKFORCE READY

FIRST students have positive outcomes in workforce skills:

90% in communication skills

93% in conflict resolution

95% in time management skills

94% in problem-solving skills

81% of *FIRST* alumni declare majors in STEM by their fourth year in college compared to 58% of their peers.

For more on *FIRST* impact data, visit www.firstinspires.org/impact

> *FIRST* has given me life skills and tools to work well with others and be a team player and always do my personal best with *Gracious Professionalism*.® These are skills I will use in my daily life and beyond!
>
> — *FIRST* LONGITUDINAL STUDY PARTICIPANT

SOURCE: *FIRST* Longitudinal Study: Findings at 84-Month Follow-Up, Brandeis University, March, 2021. Brandeis University, 2011 *FIRST*® Tech Challenge – *FIRST*® Robotics Competition Evaluation and 2013 *FIRST*® LEGO® League Evaluation

FIRST IS

BUILDING GLOBAL CITIZENS

***FIRST* Core Values emphasize friendly sportsmanship, respect for the contributions of others, teamwork, learning, and community involvement:**

- **Discovery:** We explore new skills and ideas.
- **Innovation:** We use creativity and persistence to solve problems.
- **Impact:** We apply what we've learned 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* taught me things that were crucial to my future success — not just about engineering, but about life: about leadership, friendship, and personal growth. Other high school experiences simply do not match up.
>
> —RHODES CONOVER, *FIRST* ALUM + ENGINEERING STUDENT

Grades PreK-8 · Ages 4-16*

Young Innovators Using Skills and Imagination to Solve Problems as a Team

THE CHALLENGE

Through a guided, global robotics program, students are introduced to STEM learning and exploration at an early age. Children can begin with Discover (ages 4-6) and progress through Explore (ages 6-10) and Challenge (ages 9-16), or join at any division based on their age or grade level.

THE JOURNEY

Young children are introduced to STEM concepts and develop habits of learning through engaging, fun challenges and competitions using LEGO® Education materials.

THE OUTCOME

Students gain real-world problem-solving experiences that inspire them to experiment and grow their critical thinking, coding, and design skills while building confidence, growing their knowledge, and developing habits of learning.

FIRST® LEGO® League Divisions

FIRST LEGO LEAGUE DISCOVER

GRADES

PreK-1

FIRST LEGO LEAGUE DISCOVER

This playful introductory STEM program ignites children's natural curiosity and builds their habits of learning with hands-on activities in the classroom and at home using LEGO® DUPLO® bricks.

FIRST® LEGO® LEAGUE EXPLORE

GRADES
2-4

FIRST LEGO LEAGUE EXPLORE

Teams of students focus on the fundamentals of engineering as they explore real-world problems, learn to design and code, and create unique solutions made with LEGO bricks and powered by LEGO® Education SPIKE™ Essential or WeDo 2.0.

FIRST LEGO LEAGUE CHALLENGE

GRADES
4-8

FIRST LEGO LEAGUE CHALLENGE

Teams of students engage in research, problem solving, coding, and engineering – building and programming a LEGO® Education SPIKE™ Prime or LEGO® MINDSTORMS® robot that navigates the missions of a robot game. They also participate in a research project to identify and solve a relevant real-world problem.

*Ages vary by division and country

Grades 7-12 · Ages 12-18

It's Way More Than Building Robots

THE CHALLENGE

Teams of students design, build, program, and operate Android-smartphone-controlled robots to compete head-to-head in an alliance format. Students are encouraged to create team brands and be an ambassador for *FIRST* and STEM in their communities.

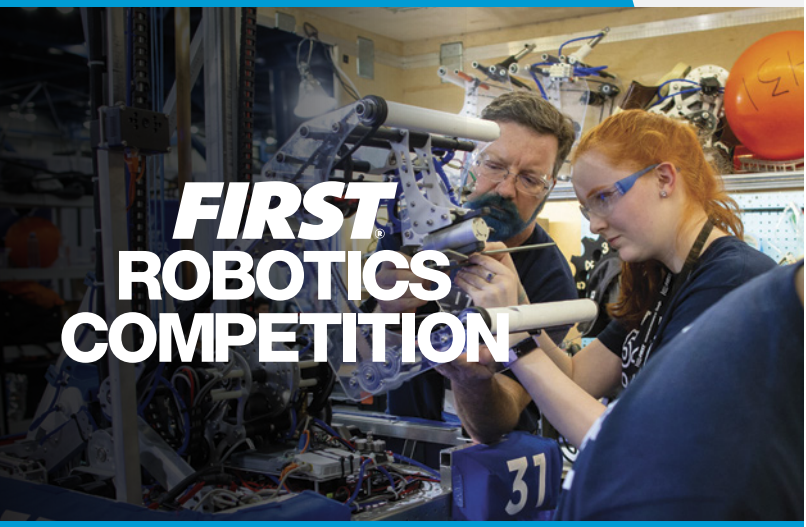
THE JOURNEY

Teams compete at local and regional events, qualifying up to the *FIRST* Championship. They earn awards based on their teamwork, creativity, innovation, and the engineering design process.

THE OUTCOME

While developing their STEM skills and mastering engineering principles, students learn the value of persistence, innovation, teamwork, and the engineering design process. High school students have access to education and career discovery opportunities, connections to scholarships and employers, and a place in the *FIRST* community for life.

Grades 9-12 · Ages 14-18



An Exciting Sport Built Around the World of STEM

THE CHALLENGE

Under strict rules, with limited time and resources, high school teams use sophisticated technology to build and program industrial-size robots for a challenging field game. Each team creates a team identity, raises funds to meet its goals, and works to promote STEM in the local community.

THE JOURNEY

At district and regional events, cheering crowds root for qualifying teams as students compete with their robots for prestigious awards and a coveted spot at the *FIRST* Championship.

THE OUTCOME

As students learn real-world engineering concepts, they build their confidence and workforce skills, and connect with professional team mentors and sponsors who can help them succeed. Plus participants and alumni have access to education and career discovery opportunities, connections to scholarships and employers, and a place in the *FIRST* community for life.

ARE YOU READY TO

CHANGE THE WORLD?

Anyone can be a part of this movement...

- Join or start a team in your area.
- Bring the *FIRST* experience to a classroom, school, or school district.
- Sponsor a team, event, or local *FIRST* program.
- Become a team mentor or coach.
- Volunteer at a local event.
- Donate to support the mission.

Visit firstinspires.org to learn more.

FIRST®

FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

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firstinspires.org