



FIRST[®]
INSPIRES

COMBINING THE
EXCITEMENT OF SPORT

WITH THE RIGORS OF
SCIENCE AND TECHNOLOGY

AND THE INSPIRATION OF
COMMUNITY

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 THE ONLY SPORT WHERE EVERY KID CAN TURN PRO

A progressive series of mentor-guided, team-based robotics challenges for students aged 6-18, *FIRST* is designed to ignite curiosity and encourage exploration. A diverse community of adult coaches, mentors, educators, volunteers, sponsors, and alumni help guide, inspire, and support students as they learn.

We are the world's leading youth-serving nonprofit helping young people discover a passion for STEM and develop the skills they'll need to succeed in today's competitive workforce.

“

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 ARE STEM CONFIDENT

88% are more interested in learning about STEM

88% better understand how STEM is used to solve real-world problems

87% plan to take a more challenging math or science course

WORKFORCE READY

93% felt better equipped to resolve conflicts

98% were better prepared to solve problems

98% were more likely to embrace teamwork

“

When I joined the team, I wasn't what you would describe as a "model student." But FIRST was a huge game-changer for me. Robotics and especially my mentors got me to change my overall outlook on life... I learned how to be a team player and have responsibilities.

”

-Evan Rotter, *FIRST* alum + automotive technician

FIRST IS

OUR FUTURE: BUILT BETTER TOGETHER

More than a decade of verifiable data from Brandeis University (including a rigorous five-year longitudinal study) supports what we already knew: *FIRST* helps students develop both self-confidence and valuable, real-world skills that can open pathways to all types of career choices and outcomes.

FIRST programs encourage students to pursue education and careers in STEM-related fields, but they also inspire kids to become leaders and innovators in any industry.



FIRST IS

COMMITTED TO CREATING A DIVERSE, INCLUSIVE, AND EQUITABLE COMMUNITY

In today's technology-rich society, STEM literacy is required for success in nearly every career path. STEM competence builds confidence and opens doors to all kinds of career opportunities. It fosters discovery and innovation in the fastest-growing fields and builds a foundation for young people from all walks of life to achieve purposeful, prosperous lives.

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 firstinspires.org/diversity.



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

FIRST LEGO® LEAGUE JR.

AGES 6-10

It's never too early to discover STEM

THE CHALLENGE:

Teams of children explore scientific concepts through a real-world theme. Kids then work together to build a model and, with LEGO® Education WeDo 2.0, code it to make it move.

THE JOURNEY:

Each team documents its work in an Engineering Notebook and creates a *Show Me* poster to chronicle its research journey. In a season-culminating Expo, teams celebrate what they've learned and created together.

THE OUTCOME:

Through their own research, critical thinking, and imagination, young children develop an early interest in STEM, learn to work together as a team to achieve a common goal, and have a ton of fun.



FIRST LEGO LEAGUE

AGES 9-16

Young innovators using skills and imagination to solve problems as a team

THE CHALLENGE:

Teams collaborate to design, build, code, and test LEGO® MINDSTORMS® robots for autonomous missions on a themed, table-top playing field. Each team works together to solve a real-world problem.

THE JOURNEY:

Each season culminates in a series of regional tournaments and championships, where teams compete with their robots and share what they've learned and invented.

THE OUTCOME:

Using STEM concepts, students overcome the same challenges that face scientists today. They develop critical-thinking and presentation skills, build self-confidence in STEM, and have fun while working as part of a team.



FIRST TECH CHALLENGE

AGES 12-18

It's way more than building robots

THE CHALLENGE:

Guided by adult coaches and mentors, small teams of students design, build, code, and operate Android smartphone-controlled robots to compete in an alliance format. Students are encouraged to create team brands and reach out to their communities.

THE JOURNEY:

Teams compete at local and regional events, building 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 basic engineering principles, students learn the value of persistence, innovation, and teamwork. High school students are eligible to apply for more than \$80 million in scholarships from colleges, universities, and technical programs.



FIRST ROBOTICS COMPETITION

AGES 14-18

An exciting sport built around the world of STEM

THE CHALLENGE:

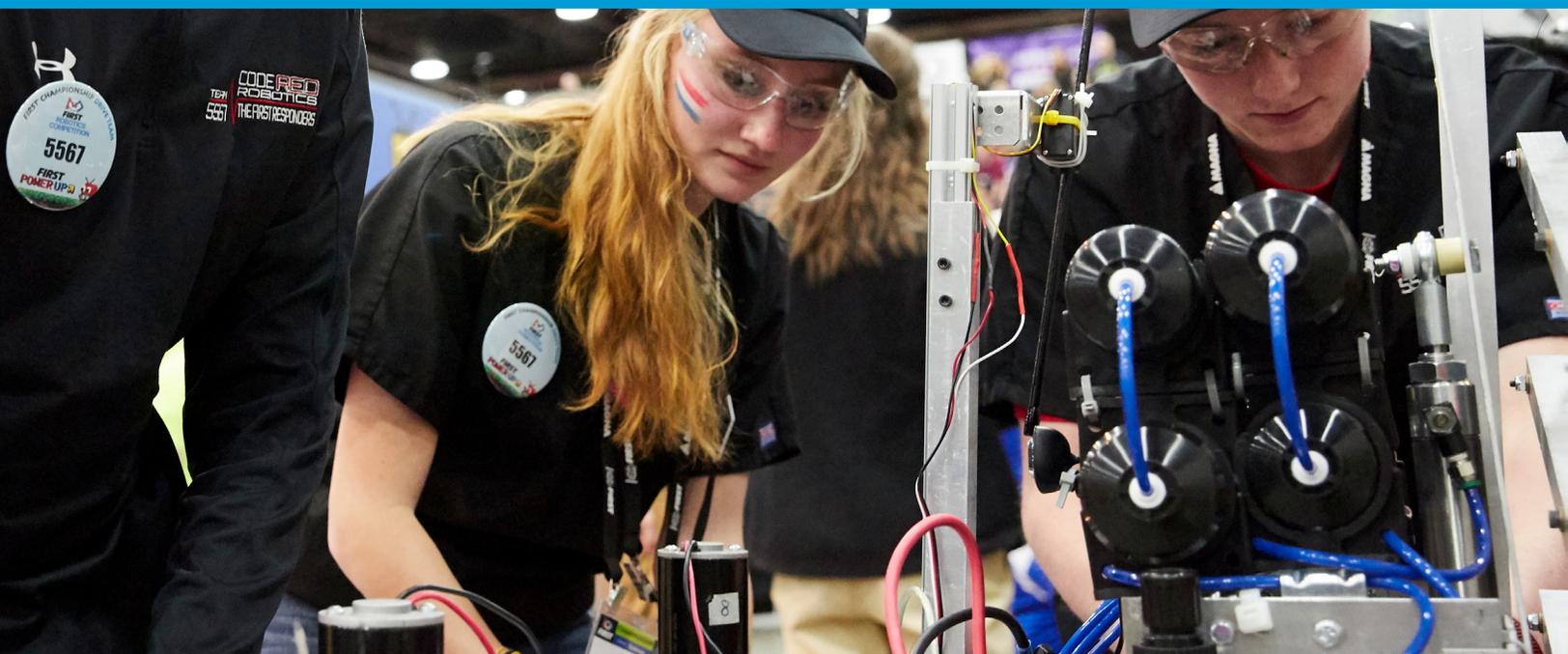
Under strict rules, with limited time and resources, high school teams use sophisticated technology to build and code industrial-size robots for a challenging field game. Each team develops a brand, raises funds to meet its goals, and works to promote STEM in the local community.

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, they can apply for more than \$80 million in college, university, and technical program scholarships.



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.



FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

200 Bedford Street ▪ Manchester, NH 03101 ▪ USA

firstinspires.org

FIRST®, the FIRST® logo, FIRST® Robotics Competition, and FIRST® Tech Challenge are trademarks of For Inspiration and Recognition of Science and Technology (FIRST). LEGO® and MINDSTORMS® are registered trademarks of the LEGO Group. FIRST® LEGO® League and FIRST® LEGO® League Jr. are jointly held trademarks of FIRST and the LEGO Group. ©2019 FIRST. All rights reserved. FI065