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 science course plan to take a more challenging math or science course were more likely to embrace teamwork and were better prepared to solve problems. FIRST taught me things that were crucial to my future success — not just about engineering, but the importance of persistence and work ethic. Especially my mentors got me to change my overall outlook on life... I learned how to be a team player.

In today's technology-rich society, STEM literacy is required for students who can benefit from them the most. We're constantly developing new strategies to create greater, more equitable pathways to all types of career choices and outcomes.

Rhodes Conover, FIRST alum + engineering student

"When I joined FIRST, I didn't know anything about robotics. I thought it was just about building robots. But FIRST taught me things that were crucial to my future success — not just about engineering, but the importance of persistence and work ethic."
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

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.
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.

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
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
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**

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

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

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*
It’s Way More Than Building Robots

THE CHALLENGE

Teams of students design, build, code, 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 are eligible to apply for more than $80 million in scholarships from colleges, universities, and technical programs.
**FIRST ROBOTICS COMPETITION**

**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 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.