FIRST IMPACT

More Than Robots℠

FIRST participation is proven to encourage students to pursue education and careers in STEM-related fields, inspire them to become leaders and innovators, and enhance their 21st century work-life skills.

www.firstinspires.org/aboutus/impact

Students, aged 6-18: It's the **hardest fun** you'll ever have.

Team mentors, coaches, and volunteers: It's the most **rewarding adventure** you'll ever undertake.

Sponsors: It's the most **enlightened investment** you could ever make.

Get Involved!

Join or start a team in your area
Sponsor a team, event, or local *FIRST* program
Become a team mentor or coach
Volunteer to fill over 100 roles

For information about *FIRST*® in your area:
www.firstinspires.org/contactus
(800) 871-8326 ■ (603) 666-3906

FIRST®

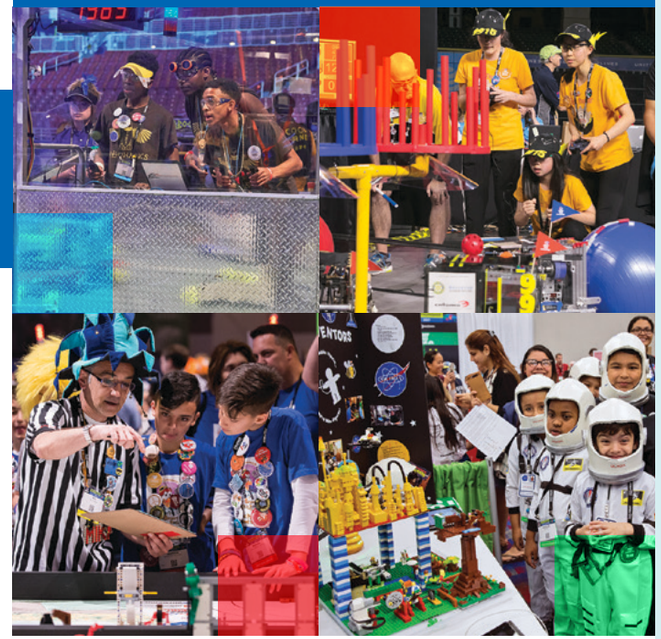
FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

200 Bedford Street ■ Manchester, NH 03101 ■ USA

www.firstinspires.org

What's *FIRST*®?

Inspiring innovation
Igniting curiosity
Creating pathways



FIRST®

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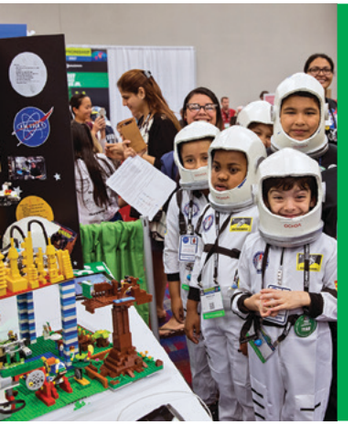
FIRST® inspires

lifelong learners
leaders
innovators
problem solvers
dreamers
builders
makers
entrepreneurs

FIRST® is the world's leading child-serving nonprofit advancing science, technology, engineering, and math (STEM). For nearly 30 years, FIRST has evolved into a global movement by engaging millions of people with a proven game-changer for preparing kids to solve the world's greatest problems. FIRST programs inspire innovation and leadership through engaging, hands-on robotics challenges developed to ignite curiosity and passion in students in grades K-12. FIRST builds powerful mentorship relationships between young people and STEM professionals, helping kids gain confidence to explore the innovation process while they learn valuable science, engineering, technology, teamwork, and problem-solving skills. FIRST creates the people who will change the world – today and tomorrow.

FIRST® is the only sport where every kid can "go pro."

FIRST® inspires a lifelong love of learning that is critical to perseverance in an ever-changing workforce. Using robotics competitions as the vehicle, *FIRST* is developing future innovators, technology leaders, and creative problem solvers. Building self-confidence, as well as STEM and digital literacy skills, is required in today's technology-rich society. STEM competence and confidence creates pathways to well-paying jobs and entrepreneurial opportunities in the fastest-growing fields, creating the potential for young people to achieve purposeful and prosperous lives.



FIRST® LEGO® LEAGUE JR.

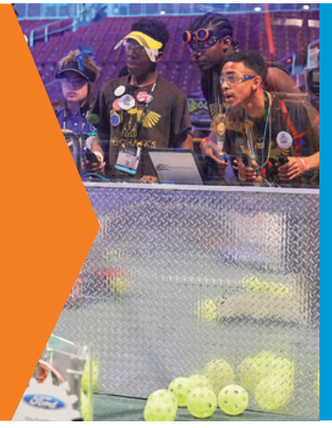
Ages 6-10
(Grades K-4)

FIRST® LEGO® LEAGUE

*Ages 9-16**
(Grades 4-8)

FIRST® TECH CHALLENGE

Ages 12-18
(Grades 7-12)



FIRST® ROBOTICS COMPETITION

Ages 14-18
(Grades 9-12)

***FIRST*® LEGO® League Jr.** captures young children's curiosity and directs it toward discovering the wonders of science and technology. This program features a real-world scientific concept to be explored through research, teamwork, construction, and imagination. Guided by adult coaches, teams use LEGO® Education WeDo to build and program a model that moves and develop a *Show Me* Poster to illustrate their journey.

CHILDREN GET TO

- Design and build a Challenge-related model and make it move using LEGO WeDo
- Create a *Show Me* Poster and practice presentation skills
- Explore challenges facing today's scientists
- Discover real-world math and science
- Begin developing teamwork skills
- Participate in expos
- Engage in team activities guided by *FIRST* LEGO League Jr. Core Values

In ***FIRST*® LEGO® League**, children are immersed in real-world science and technology challenges. Teams design their own solution to a current scientific question or problem and build autonomous robots that perform a series of missions based on an annual theme. Through their participation, children develop valuable life skills and discover exciting career possibilities while learning that they can make a positive contribution to society.

STUDENTS GET TO

- Create innovative solutions to challenges facing today's scientists
- Strategize, design, build, program, and test an autonomous robot using LEGO MINDSTORMS® technology
- Apply real-world math and science concepts
- Develop career and life skills including critical thinking, time management, collaboration, and communication while becoming more self-confident
- Become involved in their local and global community
- Participate in official tournaments and local events
- Engage in team activities guided by *FIRST* LEGO League Core Values

*Ages vary by country

***FIRST*® Tech Challenge** is designed for students who want to compete head to head using an exciting sports model. Teams design, build, and program their robots to compete on a 12' X 12' field, in an Alliance format, against other teams. Robots are built from a reusable platform, powered by Android technology, and programmed using Java or Blockly. Teams, including coaches, mentors, and volunteers, develop strategy and build robots based on sound engineering principles, such as rapid prototyping. Awards are given for the competition, as well as community outreach, design, and other real-world accomplishments.

STUDENTS GET TO

- Design, build, and program robots
- Model a real-world engineering process
- Apply math and science concepts
- Develop strategic problem-solving, organizational, and team-building skills
- Build life skills while building robots and work towards participating in tournaments and *FIRST* Championship
- Compete and cooperate in Alliances at tournaments
- Access exclusive scholarships from hundreds of colleges/universities

Rockwell Collins is the *FIRST* Tech Challenge Official Program Sponsor

***FIRST*® Robotics Competition** combines the excitement of sport with the rigors of science and technology. To meet a new challenge each year, teams of 10 or more students hone teamwork skills, design, build, and program a robot during six weeks to perform tasks against a field of competitors, create a team "brand," and raise needed funds. Participants use the same tools used by professional engineers, LabVIEW® graphical design software from National Instruments. Professional Mentors provide their time and talents to help each team succeed.

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.

STUDENTS GET TO

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

At the heart of *FIRST* are its Core Values, which emphasize the contributions of others, friendly sportsmanship, teamwork, learning, and community involvement. These include:
Gracious Professionalism® *– Respect for others, being a good sport, and sharing what you learn.* ***Coopertition***® *– Competing hard, but also helping the other teams.*