



## 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

# What's *FIRST*?

Igniting young minds.

Nurturing creativity.

Inspiring innovation.

It's a competitive *sport*.

It's more than *robots*.

It's a life *experience*.

It's *opportunity*.

It's *community*.

It's *amazing*.

For students aged 6-18, it's the **hardest fun** you'll ever have. For team Mentors, Coaches, and Volunteers, it's the most **rewarding adventure** you'll ever undertake. For Sponsors, it's the most **enlightened investment** you could ever make.

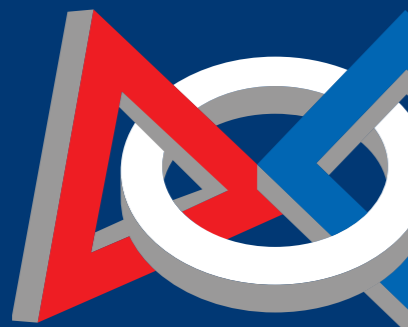
*FIRST® is a 501(c)(3) not-for-profit organization devoted to helping young people discover and develop a passion for science, technology, engineering, and math (STEM). Founded over 25 years ago by inventor Dean Kamen, FIRST is a Sport for the Mind™ where young, innovative, and creative minds explore science and technology, solving real-world problems and competing in exciting, hands-on robotics challenges. The annual programs culminate in international robotics competitions and celebrations. Through their FIRST experience, participants win recognition, gain self-confidence, develop people and life skills, make new friends, and perhaps discover an unforeseen career path.*

## FIRST IMPACT

### More Than Robots<sup>SM</sup>

*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 21<sup>st</sup> century work-life skills.

[www.firstinspires.org/aboutus/impact](http://www.firstinspires.org/aboutus/impact)



For information about *FIRST*® in your area:  
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FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

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FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY



## 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<sup>®</sup> LEGO<sup>®</sup> 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<sup>®</sup> elements to build a model that moves and develop a *Show Me* Poster to illustrate their journey.

### CHILDREN GET TO

- Design and build a Challenge-related model using LEGO components
- 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
- Share what they learn through an Online Showcase
- Engage in team activities guided by FIRST LEGO League Jr. Core Values

In FIRST<sup>®</sup> LEGO<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 Scratch or Java. 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 World Championship
- Compete and cooperate in Alliances at tournaments
- Qualify for scholarships at nearly 200 colleges/universities

Rockwell Collins is the FIRST Tech Challenge Official Program Sponsor

A varsity *Sport for the Mind*,<sup>™</sup> FIRST<sup>®</sup> 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<sup>®</sup> 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*<sup>®</sup> skills
- Earn a place in the FIRST<sup>®</sup> Championship
- Qualify for scholarships at nearly 200 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*<sup>®</sup> – *Respect for others, being a good sport, and sharing what you learn.* *Coopertition*<sup>®</sup> – *Competing hard, but also helping the other teams.*