Welcome SPECTATORS!

FIRST® Progression of Programs _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 LEGO® LEAGUE JR.

FIRST® LEGO® League Jr. teams build and program a model that moves using LEGO® Education WeDo and present their research journey on a _Show Me_ poster.

Children, Ages 6-10 (Grades K-4), 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

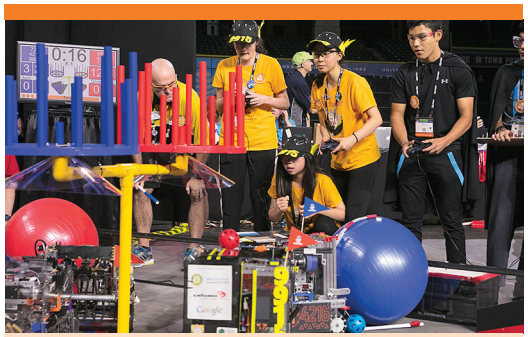
FIRST LEGO® LEAGUE

FIRST® LEGO® League teams build LEGO®-based robots and develop research projects based on a real-world Challenge that changes annually. Their activities are guided by _FIRST_ LEGO League Core Values.

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



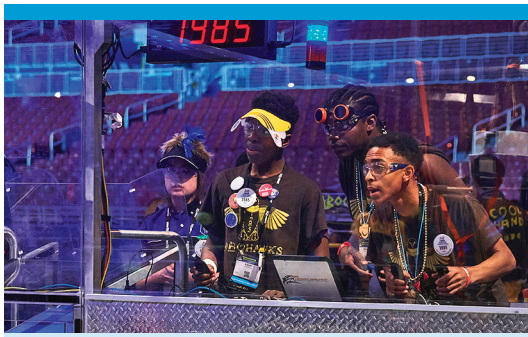
FIRST TECH CHALLENGE

FIRST® Tech Challenge students learn to think like engineers. Teams build robots from a reusable kit of parts, develop strategies, document their progress, and compete head to head.

Students, Ages 12-18 (Grades 7-12), 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

FIRST® Robotics Competition teams compete with 120-pound robots of their own design, combining the excitement of sport with the rigors of science and technology.

Students, Ages 14-18 (Grades 9-12), 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.*

Enter contact/event information or delete and leave blank.

FIRST®

FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

For information about _FIRST_® in your area: **www.firstinspires.org/contactus**

FIRST® LEGO® League Jr. Challenge

AQUA ADVENTURE℠

Each year, *FIRST*® LEGO® League Jr. presents a new and exciting Challenge to ignite the creativity of children age 6 to 10 and introduce them to the excitement of STEM and learn the skills linked to the engineering design process.

In the 2017-18 AQUA ADVENTURE℠ Challenge, teams around the globe were asked to:

EXPLORE

- How they use water at home or in their community, the water's journey, and how to improve a part of this journey.

CREATE AND TEST

- Teams designed, built, programmed, tested, and improved a Team Model to show their chosen water use, the water's journey, and their idea for how to improve a part of the journey.
- Teams used the AQUA ADVENTURE Inspire Model (a LEGO® water pump) in their design. They also used LEGO® Education WeDo to build and program at least one motorized part of their Team Model.

SHARE

- Share what they learned by participating in an Expo. They could also opt to hold an open team meeting and present their LEGO model and *Show Me* poster to family and friends.