

FIRST®-Hands-On STEM Learning Programs for Every Age

Founded in 1989 by inventor Dean Kamen, *FIRST*[®] is an international nonprofit organization that prepares young people for the future through a suite of life-changing youth robotics programs that build skills, confidence, and resilience. Because our programs are *More Than Robots*[®], students build self-confidence

and collaborative problem-solving skills as they conduct research, fundraise, design, build, and showcase their achievements. *FIRST* is backed by a global network of mentors, educators, volunteers, sponsors, parents, alumni, and program delivery partners.

Children can join any of our three programs based on age or grade level. Ages may vary by region.



Grades PreK-8 · Ages 4-16

FIRST[®] LEGO[®] League introduces STEM to children through fun, exciting hands-on learning. Participants gain real-world problem-solving experiences through a guided, global robotics program using LEGO[®] technology, helping today's students, families, and educators build a better future together. *FIRST* LEGO League's three divisions inspire youth to experiment and grow their critical thinking, coding, and design skills and showcase what they learned.

Registration Open: May - April

Challenge Release: August

Event Season: November - April

Teams: At least 2 adult mentors and up to 10 students for Challenge division, formed by schools, after-school programs, homeschools, community groups. Smaller, age-appropriate teams for Discover and Explore divisions.

Time Commitment: One to three-hour meetings, generally held for 12 sessions.

Estimated Cost:

- Discover: Class Pack Registration (up to 8 students) is \$195. Reusable STEAM Park Sets start at \$219.95.
- Explore: Team Registration is \$125. LEGO[®] Education SPIKE[™] Essential: \$319.95 (reusable).
- Challenge: Team Registration is \$250. Challenge Set: \$95. LEGO[®] SPIKE[™] Prime: \$539.90 (reusable).
- Registration includes guidebooks for teachers and students.

Check our website for grants and *FIRST* Class Pack classroom implementation options for all divisions.



Grades 7-12 · Ages 12-18

FIRST® Tech Challenge students work together with their mentors to design and build robots to compete in a dynamic and exciting challenge released every September. Teams program classroom-sized robots to follow autonomous commands before student drivers take control in two-ontwo matches. On and off the field, students develop STEM skills, engage in community outreach, practice engineering innovation, and build confidence to help them succeed.

Registration Open: May - April

Game Release: September

Event Season: October - April

Teams: Up to 15 students with at least 2 adult mentors, formed by schools, after-school programs, home schools, community groups.

Time Commitment: 90-minute to three-hour meetings, generally held twice a week for 9-12 weeks.

Estimated Cost:

- Reusable control system is \$600.
- Materials and parts are \$700-1200.

Check our website for grants and classroom implementation options.



Grades 9-12 · Ages 14-18

FIRST® Robotics Competition teams design, program, and build industrial-sized robots starting with a Kit of Parts to play an action-packed game released in January on a themed field as part of a three-team alliance. Students learn engineering and problem-solving skills as they compete for awards, create a team identity, raise funds, hone teamwork skills, and advance appreciation for STEM in their community.

Registration Open: May - December

Game Release: January

Event Season: February - April

Teams: A group of students and at least 2 adult mentors, formed by schools, after-school programs, home schools, community groups.

Time Commitment: Teams typically meet a few times a week September - December and several times a week January - April

Estimated Cost:

• Team Registration is \$6,000.

Check our website for grants.

FIRST Participants and alumni have access to education and career discovery opportunities, connections to scholarships and employers, and a place in the *FIRST* community for life.

Learn more about FIRST and our suite of hands-on programs at firstinspires.org