

# FIRST Lego League Robotics

- FIRST LEGO League (FLL) is an exciting and fun global robotics program that ignites an enthusiasm for discovery, science, and technology for students 9-14 years old. Each year FLL teams embark on an adventurous Challenge based on current, real-world issues. Guided by a team coach, the kids:
  - Research and solve a real-world problem based on the Challenge theme
  - Present their research and solutions
  - Build an autonomous robot using engineering concepts, and compete in challenges
  - Compete in teamwork challenges
- Using the Challenges, FIRST LEGO League:
  - Entices kids to think like scientist and engineers
  - Provides a fun, creative, hands-on learning experience
  - Inspires kids to participate in science and technology

Join now!  
Experience the fun with Lego Robotics

Join the informational session Aug 30<sup>th</sup> at 6pm  
DMS Commons



**2017 Hydro Dynamics Challenge** - Get ready. Get set. Roar! In the 2017 FIRST® LEGO® League Challenge, more than 28,000 teams of students age 9 to 14\* will look into the eyes of our ANIMAL ALLIES. What might become possible when we learn to help each other?

See more at: <http://www.firstinspires.org/node/3461>

FLL challenges kids to think like scientists and engineers. Teams will build, test, and program an autonomous robot using LEGO MINDSTORMS® to solve a set of missions in the Robot Game. They will also choose and solve a real-world question in the Project. Throughout their experience, teams will operate under FLL's signature set of Core Values.

Each team must accomplish 3 main objectives ... Use the LEGO Mindstorms NXT/EV3 kit to build a robot that completes several, specific tasks, demonstrate FLL Core Values and Teamwork AND complete/present a research project based on the 2017 Challenge.

## FIRST® LEGO® League

**What is FIRST® LEGO® League?**

In FLL®, children are immersed in real-world science and technology challenges. Teams research and design their own solution to a current scientific question or problem and build autonomous LEGO® robots that perform a series of missions.

*"I especially love that while robot performance is important, there are other aspects that are valued as much or more. Most places in our culture today define winning and success very narrowly, and I appreciate immensely that FLL has different values. The girls have had a blast, and FLL is now as important as dance class in our house."*  
Jennifer Robinson, Parent and FLL Coach

Through their participation, children develop valuable life skills and discover exciting career possibilities while learning that they can make a positive contribution to society.

**Three Essential Parts**

Each yearly Challenge has three parts: Core Values, the Robot Game, and the Project.

**FIRST LEGO League Core Values**

The FLL Core Values are the cornerstones of the program. They are among the fundamental elements that distinguish FIRST LEGO League from other programs of its kind. By embracing the Core Values, participants learn that friendly competition and mutual gain are not separate goals, and that helping one another is the foundation of teamwork.

- We are a team.
- We do the work to find solutions with guidance from our coaches and mentors.
- We know our coaches and mentors don't have all the answers; we learn together.
- We honor the spirit of friendly competition.
- What we discover is more important than what we win.
- We share our experiences with others.
- We display Gracious Professionalism®.
- We have fun!

**How to get involved**

Email: [FLLTeams@usfirst.org](mailto:FLLTeams@usfirst.org)

**A FIRST representative can help you:**

- Become a Coach
- Mentor or sponsor a team
- Get information for your school
- Find an FLL Partner near you

**FIRSTLEGOLEAGUE.ORG**

*"Everybody has to be able to participate in a future that they want to live for. That's what technology can do."*  
Dean Kamen, Founder, FIRST

# FIRST Lego League Robotics Application

The FIRST Lego League robotics team is a significant commitment for both the student and parents. It includes meetings twice a week, with some outside practice or assignments. The season runs through December/January (depending on competition schedule). Parental involvement is a critical factor in the success of the team. In addition to building LEGOs and programming, there is a research portion of the project that is equally as important to the success of the team.

**If you are interested, and new this year, please have your parents email the following information or submit online to the contacts below by Friday, August 25<sup>th</sup> 2017.**

**Submit Online at <https://goo.gl/VHLC9x> (Scan the QR Code)**

1. Student Name and grade
2. Parent(s)/Guardian Name
3. Home Phone
4. Parents Cell Phone
5. Parents email address
6. List any prior Lego Robotics experience. (no experience necessary)
7. Student availability (meetings are generally 2 evenings per week for 2 hours between 5:30 and 8PM).
8. Parent volunteer information. Are you willing to help? Availability and contact information (if different from above). We are in need coaches and assistant coaches for teams.
9. Student write a short essay between ½ and 1 page long (in email, or attached), on why you want to be on the team, and how you will be an asset to the team.



The information above will be used to place students on one of the team. Returning students will be given first priority, followed by order the applications are received. Most of the costs for equipment and competing are being covered by corporate sponsors. A nominal charge of up to \$50 per student may be needed to meet incremental costs.

To be eligible, a student cannot be older than 14 on January 1, 2017.

An informational/ organizational meeting will be held in **Dunlap Middle School commons on August 30<sup>th</sup> at 6PM.**

For additional Information Contact:

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**FIRST**

Where kids walk in and innovators walk out

**Jr.FLL**  
Junior FIRST® LEGO® League

**FLL**  
FIRST® LEGO® League

**FTC**  
FIRST® Tech Challenge

**FRC**  
FIRST® Robotics Competition

## What is FIRST®?

FIRST was founded by inventor Dean Kamen to inspire young people's interest and participation in science and technology. FIRST has four programs for young people, starting at age 6 and continuing through middle school and high-school levels up to age 18.



For Inspiration and Recognition  
of Science and Technology

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