



Our tips on

How to Start Your Own **FIRST** Team

Lexington  Legoheads

Do you like building things? Playing with computers? Think robots are cool? Then *FIRST* is for you!

With this simple guide, you can get started in no time!

Why Start a **FIRST** Team?

By starting a **FIRST** Team, you'll get to...

- Discover the world of robotics
- Conduct research about a specific subject
- Learn how to work in teams
- Understand world problems
- Benchmark your skills against others
- Make new friends

Before you start...

Make sure you know what you're signing up for. To start a team, you need to make sure you have enough people and money. If that seems like a lot, there might also be teams in your area, which you can join.

Talk to your parents about it, and show them the “Dear Mom and Dad” section on the next page.

FIRST offers four robotics programs. You are allowed to participate in each program based on your school year.

FIRST Lego League Junior (FLLJr)

This is for kids in grades K-4. Teams of up to 6 members will explore and research a real world scientific problem like recycling, food safety, etc. Teams will create a poster showing their journey of discovery, and will create a motorized model using LEGO elements.

⌚ <https://www.firstinspires.org/robotics/flljr>

FIRST Tech Challenge (FTC)

This is for kids in grades 7-12. Teams of up to 15 members will be challenged to create and program a robot to compete in a floor game against other teams. *The Legoheads are part of this program.*

⌚ <https://www.firstinspires.org/robotics/ftc>

FIRST Lego League (FLL)

This is for kids in grades 4-8. Teams of up to 10 members will be given a real world engineering challenge and will have to research and develop a solution, and compete using LEGO based robots they create and program. *Before starting FTC, the Legoheads were part of this program.*

⌚ <https://www.firstinspires.org/robotics/fll>

FIRST Robotics Competition (FRC)

This is for kids in grades 9-12. Teams will be given a 6 week limit to raise funds, create a team brand, along with building and programming an industrial size robot to compete in a difficult field game.

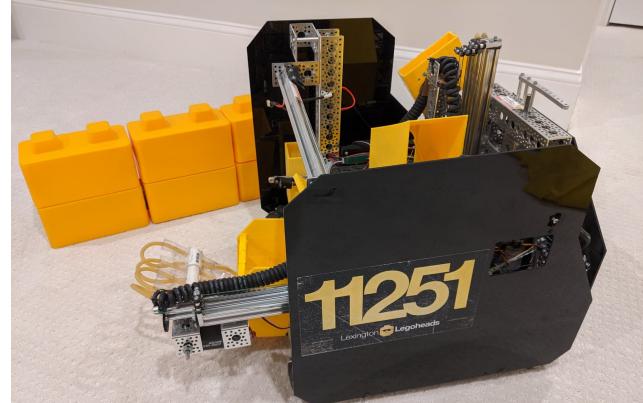
⌚ <https://www.firstinspires.org/robotics/frc>

Our tips to get you started.

Once you've set up a team and budget, it's important to brainstorm your design process and make a business plan. What are you trying to accomplish first? What can I spend on a certain category and still have enough money for another? Make a spreadsheet and write everything down. Then check off each item one by one. The first season is always the toughest, but you'll get the hang of it!

We've also made videos offering advice on specific topics, which you can check out on our website.

⌚ legoheads.weebly.com/videos



Our FTC robot from the 2019 season

Dear Mom & Dad,

Here is why you should sign your kid up for *FIRST* Robotics. *FIRST* provides kids with challenges that they are forced to research and solve as a team, allowing their creativity to run wild. While there is a lot of time that needs to be put into your work, it ends up being extremely fun and rewarding once it all comes together. It is not required that you start your own team, there are plenty other places where your kid can join a team like Einstein's Workshop located in Burlington, MA, Lincoln Labs in Lexington, MA, and other places in your area.

Average cost per team (with equipment)

<i>FIRST</i> Lego League Jr	\$300
<i>FIRST</i> Lego League	\$800
<i>FIRST</i> Tech Challenge	\$2,250
<i>FIRST</i> Robotics Competition	\$5,500

Learn more about our team.

⌚ legoheads.tk

Lexington  Legoheads