

## Robot Challenge

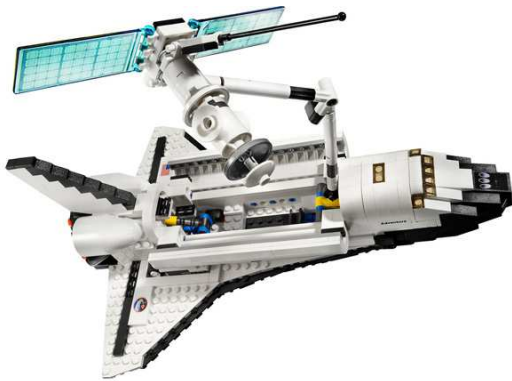
Your team builds at least 12 pre-designed Lego Missions to place on a 4'x 8' playing field. Carefully analyze them. You will get only 2.5 minutes to earn as many points from them as possible.

You know the fun from building with Legos as they inspire imagination and creativity. Now, enhance ordinary bricks with a robot brain that you really can program with drag and drop pictures and controls. Add sensors, wheels, and Lego mechanical devices to make a self-guided robot that will solve those missions.

That's the Robot Challenge. You will get 3 runs at each tournament to try to out-perform other teams from across the state, maybe the world!

But that's not all.

Your team's robot also can show your stuff with efficient, accurate programming, clever mechanics, and effective solutions to impress the Robot Design Judges.



## Real World Solutions Project

Have you ever wanted to impact the real world in an area of important need?

Within this year's theme "into Orbit", you will choose a problem people face in the world related to Orbital Activities. Your team seeks a practical innovative solution that can really solve that problem.

Your team will research the problem to truly understand why it's a problem. Brainstorm and test out possible solutions. Then consult experts in the field. Narrow your work down to one solution so that you can start putting it into practice right now. Some teams have even started businesses or helped shape their community with their solutions.

Then, communicate your solution. Share your solution with the community that needs it. You'll want to let your creative presentation skills shine. Write a skit. Make props and posters. Get your solution across in an effective way so that it really can impact others.

Your whole team will get to present your work to FIRST Lego League Project judges so they can compare your solution to the other teams' ideas. They know what to look for from smart, young people. You will show them your solution will be practical, innovative and really help people solve a real problem.

## Core Values and Team Work

In just three months there is a lot to get done. But you aren't doing it alone. You have up to ten team members to do it with you.

The coaches and mentors can guide but they can't do it for you.

The FIRST Core Values help to focus you with Gracious Professionalism, Cooperation, and building Team Spirit.

Your team will need to be work together, not as isolated individuals. Organization will help as you focus meetings, share the roles and divide the work. With The Robot Challenge, The Project, and practicing The Core Values your team will need to balance your efforts. Communication is essential as you discuss together the problems and develop solutions from the mistakes, so let everyone be allowed to share their talents and input.

Have fun together as you solve the Challenges, fix the world, and share the stage.

Your team gets to show their team spirit to the Core Values Judges. They want to discover how your team put the Core Values into practice the whole season long. Your team will even get to face the "Secret Team Challenge" together. It's different every year and you can't tell any other teams what it is.

## The Challenge Season

Registration: July 15- August 26\*\*

We encourage you to sign up as soon possible so we can organize teams and equipment. We may accept team members as late as September 30<sup>th</sup> if resources permit.

Season Opening Meeting:

August 5<sup>th</sup>– 6 pm

At this meeting will introduce the season with some demonstrations and information. If possible, we will organize teams and discuss schedules and tips to make it a great season.

The Challenge Release

August 1<sup>th</sup> 12 EST

Team Meetings Schedules

To be determined at opening meetings and by coaches.

End of late comer Registrations

September 30<sup>th</sup>

FIRST Tournament

November or December:

Place and Date to be determined.

Season Wrap Up Meeting

December (after the Tournament)

\*\* The First Lego Robotics program at Messiah is partially funded with an Activity Fee for each team member participating. This will cover the FIRST Registrations, equipment, and a Team T-shirt. For more information, contact the school office.

## Be a Part of the Fun

As a Team Member

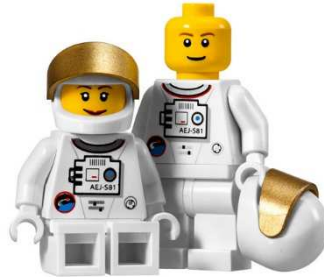
Open to Grades 5-8 (September 2017)

As a Coach

Open to Adults willing and motivated to guide a team through the season.

As a Mentor/ Assistant

Assist the Program and the team(s) with meetings and special projects.



**Learn more at**

[www.firstinspires.org/robotics/fl](http://www.firstinspires.org/robotics/fl)

**Season Teaser:**

[https://www.youtube.com/watch?v=pdGgp1Nl\\_vL0](https://www.youtube.com/watch?v=pdGgp1Nl_vL0)

**To Register:**

Sign up in the Church Narthex,  
School Office or,  
Contact the Lego League Coordinator

**To Get Involved or**

**more information, contact:**

Lego League Coordinator:

Lawrence Bade

Email: [lmsbade@gmail.com](mailto:lmsbade@gmail.com)

(715) 514-1897

Messiah School Office:

715-834-2865

*F.I.R.S.T.*



**Lego Robotics  
League**

**2019 Challenge**



**Messiah Lutheran School**

**for Grades 5-8**

(attending Messiah Church or School)