

FLL Application 2024-2025

Applications are due on April 19th with all paperwork signed and projects delivered to room 207 by 3 pm.

What is FIRST Lego League?

FIRST stands for “For Inspiration and Recognition of Science and Technology.”

FLL is a robotics program for students ages 9-14 that is intended to get students excited about science and technology while teaching them important life skills. Teams of students design, build and program an autonomous robot to score points on a 4' x 8' mat, do research and create an innovative solution to a problem as part of a project, and are guided through everything they do by the FLL Core Values. These three elements - the Robot Game, Project, and FLL Core Values make up the yearly FLL Challenge.

You can get more information about FLL through the FIRST Website:

<https://www.firstinspires.org/robotics/fll>. You may also direct questions to Mr. Morgan at morgan@sps186.org.

FLL Season Timeline

The FLL challenge is released in April and lles teams will generally meet at least twice per week after school to prepare for a tournament which takes place in late November or early to mid December (teams often meet more than twice per week as the date of the tournament approaches). **Students are also expected to do research/work on their own in support of their team's efforts.** What days teams meet will be based on the availability of their coaches and available space to meet in. Teams do occasionally meet on weekends and/or during vacation periods at other locations and may have field trips as part of their research. This is an intensive program which takes significant time, especially when the tournament is near.

Since this is a team activity, students must be dedicated to working both independently and with the rest of their group and to participating throughout their time on the team in order to ensure the group's greatest chances of success.

The FLL season is short, intense and loaded with a variety of time-consuming projects.

Students selected for a team need to be present for all team meetings. Students who are participating in multiple afterschool activities are discouraged from taking a place on an FLL team. Team meetings are scheduled based on the availability of coaches. Because of this, student schedules will not be considered when planning weekly team meetings.

At the tournament teams are judged on their robot (mechanical design, programming and strategy), their project (research, innovative solution and presentation) and their “core values” and also compete in a robot competition. Teams that do well enough at the tournament may advance to a state championship tournament that will be held in January or early February and

teams that do well enough at that tournament may advance to national or international tournaments held from April through July.

Applying to Join a Team

Students who are interested in applying to be on an Iles FLL team should complete the following application packet and turn it in by the deadline. This year's deadline is April 19th, 2024.

Complete applications must be turned in by all students interested in participating on an Iles FLL team for the 2024-2025 school year (including students who have previously participated on a team).

Completing this packet does not guarantee that a student will be placed on a team. How many teams there are depends on how many parents volunteer to coach. We will evaluate the applications received, consider the number of spots available, and use our best judgment to determine which students will be asked to participate and on which team those students will be placed.

Parents interested in coaching should contact Mr. Morgan (morgan@sps186.org) for more information. Students of parents who coach still must complete all application materials, but if they are submitted properly, will automatically be placed on their parent's team.

FLL members will be required to pay \$150 to participate. (Checks payable to Iles School)
Needs-based scholarships are available. Please contact Mr. Morgan for information about FLL scholarships. The participation fee is due with the application. If a student is not placed on a team, the fee will be returned. Once your child has been placed on a team the fee is non-refundable.

Application Materials:

In order for applications to be complete, students must submit:

1) Essay:

FLL Rookies please write to explain why you want to join an Iles FLL Team.

FLL Veterans please write to explain how you use the core values in your daily life.

Application essays should be about one double-spaced page with a size 12 font.

2) Project: Applicants need to submit a research project based on the theme of water

3) Iles Lego League Policies signed by both student and parent/guardian

4) \$150 participation fee (or fee waiver request) *Checks made payable to Iles School* 4) Photo Release Form and Contact information sheet

****All materials must be submitted to Mr. Morgan in room 207 by 3:00 P.M. on Monday, May 15th. *Late applications will not be accepted.* There will be no exceptions for late submissions. Applications will be happily accepted earlier than that date, but will be turned away if they are late. Students who have submitted completed applications by the deadline will read their essay to coaches and other students during lunch recess on Friday, May 15th. Teams will be announced shortly thereafter.**

Iles School FIRST LEGO League Application Checklist: All items are due no later than April 19th and must be submitted to Mr. Morgan for consideration.

- ☐ Essay
- ☐ Iles Lego League policies statement with student and parent signatures
- ☐ Photo Release form
- ☐ Tournament attendance contract
- ☐ Contact Information sheet
- ☐ Water themed project of the student's choice

FLL Essay

In 250 words or less, please respond to one of the following prompts:

FLL Rookies please write to explain why you want to join an Iles FLL Team.

FLL Veterans please write to explain how you use the core values in your daily life.

Iles Lego League Policies

Student Name: _____

Philosophy - All participants deserve the opportunity to participate in Lego League in a safe and nurturing environment. Participants need to represent the school and our learning community in a safe and responsible manner.

1) Rules: Although Lego League is an after-school activity, **all school rules remain in effect** and students must follow the rules in the student handbook. Students must pay particular attention to how they behave in common areas (ie: no running in the hallways) and must also follow school rules regarding computer usage (do not attempt to defeat school firewalls or use social media, etc). If in doubt, consult the school handbook of conduct. Students who cannot follow school rules will be asked to leave the team.

2) Behavior: Displays of aggressive or anti-social behavior and/or use of profanity will not be tolerated. Bullying, threatening or intimidation of other students or the use of profane language or code words for profane language will result in the student being removed from the group until s/he can behave in a respectful manner. His/her parents will be notified. The second time the student will be asked not to return to Lego League until the student, his/her parents and the coach meet to talk about the student's behavior. A third instance can result in the student not being allowed to continue with the team.

3) Assignments: There are homework and research assignments associated with Lego League. The first time a student does not complete an assigned task they will be given the opportunity to complete the task during the meeting and his/her parents will be notified. The second time a student does not complete a task her/his parent will be called to pick the student up and the student will not be able to continue with Lego League until they have completed all assignments.

4) Attendance: Attendance is not optional. If a student is unable to attend a meeting, his/her parent must contact the coach as soon as possible. Students with multiple unexcused absences will not be allowed to continue with the team. Unless approved by the coach, it is assumed that regularly scheduled FLL meetings will take precedence over other after school activities that the

students may want to participate in. Teams get disqualified if one team member is not in attendance during competition. **Attendance at the competition is mandatory.**

5) **Timeliness:** Being on time for practice and competition is essential. If a parent is unable to drop-off or pick-up a student on time, his/her parent must contact the coach as soon as possible and/or make other arrangements. Students with multiple unexcused tardies or who does not have arrangements to be picked up on time on multiple occasions will not be allowed to continue with the team.

6) **Core Values:** Students are asked to exhibit the core values of FIRST Lego League. These values are:

Discovery: We explore new skills and ideas.

Innovation: We use creativity and persistence to solve problems.

Impact: We apply what we learn to improve our world.

Inclusion: We respect each other and embrace our differences.

Teamwork: We are stronger when we work together.

Fun: We enjoy and celebrate what we do!

Student Signature: _____

Parent Signature: _____

Photo Release Form:

Student Name: _____

We occasionally post photos of students and/or teams on the Iles Lego League website. Pictures or video of the students participating in FLL activities are also occasionally used by the media when reporting on either a specific team or an event FLL teams are participating in.

_____ I **give** permission for pictures/video of _____ participating in FLL team activities to be posted online or used by media.

Signature of Parent/Guardian _____

_____ I **do not give** permission for pictures/video of _____ participating in FLL team activities to be posted online or used by media.

Signature of Parent/Guardian _____

Tournament Attendance Contract

Student Name: _____

FLL is a competitive program. **Attendance at the tournament is NOT optional.** Students are expected to participate in and attend all the scheduled activities during the tournament. With the exception of illness and family emergencies nothing excuses a student from participating at the tournament. Teams get disqualified if the whole team is not in attendance during the competition and the team becomes ineligible to win awards.

By signing this document you are committing to have your child attend the Regional Qualifier Tournament and State Competition (If the team advances to state). These events are **mandatory** and only excused due to illness or family emergencies.

If a child is not able to attend the entire tournament, for reasons other than illness or family emergency, he or she will be dismissed from the team and all fees will be forfeit to the program.

I understand that my child _____ must attend the Regional Qualifier Tournament and the State Competition if the team advances.

Signature of Parent/Guardian _____

Contact Information:

Student Name: _____

It is important that we are able to stay in touch with families, especially since team meetings extend until after the school office has closed and we have occasional field trips or weekend meetings. Please fill out the following information:

Parent/Guardian #1

Name: _____

E-mail address: _____

Home Phone: _____

Cell Phone: _____

Work Phone: _____

Home Address: _____

Parent/Guardian #2 (to the extent that it differs from Parent/Guardian #1)

Name: _____

E-mail address: _____

Home Phone: _____

Cell Phone: _____

Work Phone: _____

Home Address: _____

Research Project

This year's FLL theme is related to the topic of water. Students applying to join an FLL Lego League team should create a research project of their own design using the theme of water. The following list is by no means all that an applicant is limited to creating. Please contact Mr. Morgan if more guidance is needed.

Student projects can assume any form that the student is comfortable creating. Slideshows, dioramas, posters, books or anything else that a student might want to create are acceptable.

Research requirements

- ☐ Minimum of 3 resources required with citations
- ☐ A clear research question stating what the applicant set out to learn at the beginning of the research project.
- ☐ Findings, new learning and discoveries shared through the project.

Water Cycle: Explore the different stages of the water cycle (evaporation, condensation, precipitation, and collection) through simple experiments or illustrations. Create a poster or a diorama to represent each stage.

Water Pollution: Investigate sources of water pollution in your community (e.g., litter, chemicals, sewage) and their impacts on local water sources. Propose simple solutions for reducing water pollution, such as organizing a community cleanup or using eco-friendly products.

Conservation Techniques: Research ways to conserve water at home and in daily activities. Conduct experiments to demonstrate the effectiveness of techniques like turning off the faucet while brushing teeth or fixing leaky faucets.

Water Testing: Learn about the importance of clean water and conduct simple water quality tests using test strips or kits. Test the water from different sources such as tap water, bottled water, and local ponds or streams. Compare the results and discuss what they mean for human and environmental health.

Water Creatures: Explore the diverse ecosystem of water bodies by researching different aquatic creatures like fish, frogs, turtles, and insects. Create a habitat diorama showcasing these creatures and their adaptations to aquatic environments.

Water Conservation in Plants: Investigate how plants use water and the importance of watering them efficiently. Conduct experiments to compare the water retention of different types of soil or the effectiveness of various watering techniques (e.g., drip irrigation vs. sprinklers).

Water in Art and Literature: Research how water is portrayed in art, literature, and folklore from different cultures around the world. Create a collage or storybook featuring water-related artwork or stories.

Water Sports and Activities: Explore the physics of water by studying concepts like buoyancy, surface tension, and water pressure through hands-on experiments or demonstrations. You could also research the history and cultural significance of water sports like swimming, sailing, or rowing.

Water and Weather: Investigate the relationship between water and weather phenomena such as rain, clouds, and storms. Create a weather journal to track rainfall patterns, temperature, and humidity over time.