

#### SWIFT Savant Youth Robotics Club Information Packet

#### Welcome to SWIFT!

Thank you for your interest in joining the SWIFT Savant Youth Robotics Program. Our mission is to inspire young minds to engage in science, technology, engineering, and mathematics (STEM) through the exciting, hands-on experience of participating with a *FIRST* Lego League Challenge and/or STRIPE Competition team. This information packet provides essential details about the program for students aged 10-13 (grades 4-8) and includes a link to the registration form.

## FIRST Lego League Challenge Program Overview

What is the FIRST Lego League Challenge? FIRST LEGO League Challenge is an international competition where teams of 6-8 students build, program, and compete with LEGO SPIKE Prime robots. Each season introduces a new real-world theme, challenging teams to:

- Focus on team building skills and practicing the FIRST core values (Discovery, Innovation, Impact, Inclusion, Teamwork, and Fun)
- Develop an Innovation Project, where students research and solve a theme-related problem.
- Design, build, and program a robot to complete missions on a game field/table.
- Effectively present their project and process to a panel of judges...

You can learn more about FLL Challenge program by visiting https://www.firstinspires.org/robotics/fll

## **STRIPE Competition Overview**

What is STRIPE? STRIPE is a regional robotics competition designed specifically for upper elementary and middle school students to develop engineering and coding skills while competing in a friendly, mission-based challenge using SPIKE Prime (or other) robotics kits. Teams of two compete locally via an electronic leaderboard, with leaderboard top teams qualifying for in-person Divisional tournaments. This program emphasizes:

- Engineering design process.
- Hands-on building and coding.
- Strategy, teamwork, and problem-solving.
- Interative practice and improvement

You can learn more about STRIPE Competition program by visiting https://www.stripecompetition.com/

## What Makes SWIFT Unique?

No matter which competition program you choose, here at SWIFT, we guide EVERY team to pursue excellence in:

- 1. **Gracious Professionalism:** Compete kindly, help others, and celebrate everyone's successes.
- 2. **Skills Development:** Learn coding, building, research, and presentation skills.
- 3. Robot Innovation: Design creative and effective robots to master each year's missions.
- 4. **Documentation:** Keep track of progress through team notebooks, which help during judging.
- 5. **Outreach:** Share your knowledge by inspiring younger students or participating in community events.
- 6. Team Identity: Build a unique team brand with a name, logo, and team spirit.

## **SWIFT Robotics Savant Program Timeline Calendar of Events**

### **Season Timeline for both programs:**

- FLL Challenge Missions Release: August
- FLL and STRIPE(Fall) Season Kickoff: September
- FLL and STRIPE(Fall) Build Season: September to December
- STRIPE(Fall) Leaderboard Competitions: September to December
- FLL Qualifying Competitions: November to December
- STRIPE Divisional Competition (pending):: December (for teams that qualify)

## **Participant Expectations**

SWIFT Robotics is a fun and exciting place to be. We love exuberance and enthusiasm from our students and we strive to foster an environment that is positive and empowering. In order to do this we have high expectation for student behavior. All SWIFT Savant students must:

- Respect their coaches and mentors: Students will be expected to follow instructions quickly and accurately. Our coaches are responsible for your physical and situational safety; it is vital that you listen to them at all times. Many of these adults or older students also have much experience in the programs you are experiencing; if you heed the tips and pointers they give you, you will certainly find success more quickly and easily than if you try to "reinvent the wheel"!
- Respect other students: While there will always be challenges and differences of opinion when working with a
  team, here at SWIFT we use effective communication and calm mediation to resolve issues. We never insult or
  injure another person. We treat each other with kindness and tolerance at all times.
- Respect the robotics equipment and facility. Please keep our SITE organized and tidy this benefits YOU as you are building and designing, as you will know where everything is. While each team has their own robot, kit, and electronics, the missions, competition tables, extra parts, craft material, books, and classroom space are shared by all the teams! Please leave things in a better state than you found them!
- Take responsibility for their own actions. SWIFT Savant students are quick to "own up" to mistakes, and even
  quicker to initiate good ideas. We never mind failing! Each failure gets us closer to success! Sitting in a problem,
  however, doesn't help a positive and humble attitude, along with proactive choices are the tools we use to
  continuously move forward.

## **Parent Volunteer Opportunities**

The success of the SWIFT Robotics teams depends on the invaluable support from our parent volunteers. Here's how you can help:

- Coach: Manage and run an FLL team (6-8 students) or a group of 3 STRIPE teams (6 students). No experience necessary we will provide all training. Coaches receive full tuition for one participating student.
- Assistant Coach: Help manage and run an FLL team (6-8 students) or a group of 3 STRIPE teams (6 students).
   No experience necessary we will provide all training. Assistant coaches receive a half tuition discount for one participating student.
- **Meeting Facilitator**: Often, students just want to put in extra time! Adults who can supervise additional meeting times are needed!
- Event Transportation Coordinator: Each FLL team, and many of our STRIPE teams will need to travel at times
  to in-person competitions. A transportation coordinator will arrange for carpooling as needed.
- Event Meal Coordinator: Each FLL team, and many of our STRIPE teams will need to travel at times to in-person competitions. An event meal coordinator will work with families to arrange for group meals when needed, including pickup, payment, and delivery to the venue as well as collecting funds from families.
- **Social Media Manager**: Manage and update the team's facebook and instagram accounts with the latest news, photos, and events.

Please contact Program Director, Heather Wright, to volunteer!

## **SWIFT Robotics Savant Program - FAQ**

## Q: How much does the program cost?

**A:** The cost for participation in the SWIFT Savant Youth Robotics Program is \$100/month club membership fee. FLL members must commit to at least the four months of the FLL/STRIPE fall season (September - December) OR the STRIPE spring season (January-April). Discounts available for participation in both seasons. Needs-based financial assistance is available upon request and is determined per situation. Please contact SWIFT Executive Director, Scot Padgett, for more information.

Additional costs may be incurred for travel to major competitions (if teams qualify), such as the FLL State Championship, STRIPE Divisional Tournament, FLL World Championship, or STRIPE International Tournament..

#### Q: When do students meet?

**A:** Team meeting times will be determined by coach and student availability. When you register, you will be invited to select several of the most convenient days/times for your family. We cannot guarantee, but will try to accommodate each student as best we can. Teams will generally meet once a week, but have access to the SITE (the SWIFT Robotics facility) scheduling calendar, so additional practices may be scheduled, especially as competition days approach. Regular attendance is key to building teamwork and ensuring progress!

### Q: When do we get the new game challenge?

**A:** The new game for the FIRST Lego League Challenge is released on August 5 and 12pm. You can see the challenge reveal on youtube. The STRIPE competition missions will be released in early September (date still TBD) and can be found on their website.

### Q: How far do we need to travel to competition events?

**A:** The distance to events varies. Local competitions and scrimmages are usually within a 1-2 hour drive, while regional, state, and divisional competitions may require travel of up to 3-4 hours. The World Championship, if the team qualifies, will be held in Houston, Texas and the International STRIPE competition is tentatively slated for Jamaica.

### Q: How long do competition events last?

**A:** Events can vary in length:

- Local Competitions/Scrimmages: Typically a full day, from early morning (leaving as early as 5:45am) until late afternoon/evening (Returning as late as 9pm).
- Regional/State Competitions: May span 2 days, if team chooses to travel to the venue on the evening before the event. Otherwise, these events are the same as Local events.
- World Championship or International STRIPE Competition: A week-long event including travel, competition days, and return travel.

### Q: How will students get to events?

**A:** Transportation to local events is usually coordinated among parents, with carpooling being a common solution. For regional, state, and national events, the team may arrange group transportation. Parents are encouraged to assist with driving and coordinating travel plans.

#### Q: What are the different team positions?

**A:** A SWIFT team has various roles to suit different requirements for team operation as well as different student interests and skills. Possible roles include, but are not limited to:

- **Team Captain:** Leads the team, coordinates activities, and represents the team at events.
- **Builder:** Designs, constructs, and maintains the robot.
- Programmer: Develops and tests the software that controls the robot.
- **Presenter**: Helps team prepare to effectively share their Innovation Project (FLL only)
- **Operator:** In charge of running the robot during competition events
- Researcher: Manages Innovation Project information collection and compilation. (FLL only).
- Recorder:: Manages internal team records and software versions

• Fundraising/Sponsorship Team: Secures financial support and manages fundraising activities.

## Q: How can families help?

**A:** We are very grateful if families can volunteer in various ways, including:

- Event Transportation: Helping with driving to and from events.
- Practice Support: Assisting coaches during practice sessions.
- Outreach Events: Helping organize and participate in community outreach activities.
- Fundraising: Coordinating and supporting fundraising efforts.
- **Mentoring:** Providing technical expertise or mentoring FLL or STRIPE teams.

### Q: How will team and parent communications be managed?

A: ALL communication will happen via the Slack app. We ask that each parent download the app to their phone, their computer, or both. You will then be added to the workspace for your student's team. We will use this channel for important communications, especially student schedules and event logistics.

# Ready to get started? Join us TODAY!!

Complete the registration form <u>HERE!</u> (https://form.jotform.com/252024652085149)



### **SWIFT Contact Information**

For any questions or additional information about the events or the program, please contact us:

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We look forward to your participation and hope to make this a fun and educational year for all team members!