



FLL
Program
2021



FIRST[®]
LEGO[®]
LEAGUE

CHALLENGE

CARGO CONNECT



What is FLL Challenge?

- ▶ **The Robot Game**

Using a LEGO MINDSTORMS robot kit, a team designs, builds and programs an autonomous robot to achieve specific missions and earn points. Robots compete in three 2.5 minute rounds in an attempt to earn as many points as possible, and teams are evaluated on mechanical design, programming, and innovation & strategy.

- ▶ **The Innovation Project**

Teams conduct research to solve a real-world problem, develop an innovative solution, share their findings with community stakeholders, and present their work at the competition. They are evaluated in research, innovative solution and presentation.

- ▶ **Robot Design and Programming**

Teams build and program a LEGO MINDSTORMS robot (RCX, NXT, EV3 or Spike PRIME) and share their work at the competition. Teams are evaluated on their engineering process of both robot design and robot programming, explaining their design iterations and strategies.

- ▶ **Core Values**

The *FIRST* **Core Values** are the cornerstones of the program. Teams are evaluated on HOW they work together, as well as inspiration, teamwork and gracious professionalism.

Season Details

- ▶ Practices twice a week (Tuesday and Thursday)
- ▶ 7pm-8:30pm - Additional programming/CAD classes 6-7PM
- ▶ Prior Lake High School Commons
- ▶ Season lasts from September 7th- November 23rd
- ▶ Tournament held on November 20/21rd at PLHS
- ▶ No practice on the following nights:
 - ▷ October 7th (PLHS Conferences)
 - ▷ October 21th (MEA Break; School closed)
 - ▷ November 2th (Election Night)
- ▶ Registration fee: \$133
- ▶ \$50 deposit (due at first practice) returned when kits are returned in working condition.

Season Details (cont.)

▶ We provide:

- ▶ Lego EV3 Robot and kit
- ▶ Laptop
- ▶ 4x8 foot practice tables
- ▶ Mission mat and models
- ▶ Storage bin for transport
- ▶ KINGTeC mentors
- ▶ National registration
- ▶ State registration (all tournament fees)
- ▶ Practice space
- ▶ Mock tournament

▶ You provide:

- ▶ Elements related to project
- ▶ Parent supervision and coaching at practices
- ▶ 2 hours of volunteering per participant family at tournament
- ▶ Team t-shirts, if desired

Team Formation

- ▶ Sept 7th @ 6-8PM in the Multipurpose Room at PLHS.
- ▶ Grades 4-8 (3rd Grade with 2 years FLL Jr. experience)
- ▶ 5-7 kids per team
- ▶ Same or adjacent grades (i.e. Not 5th with 7th)
- ▶ 2 parent coaches (No experience necessary)
 - ▷ We are a volunteer organization, meaning this is not a drop-off program
 - ▷ If your child is disruptive, you may be asked to accompany them to every practice

What Next?

- ▶ Register on KINGTEC2169.com on the FIRST Lego League Challenge page under Progression of Programs Tab. (Will be available prior to Sept 7th.)
- ▶ Pay registration fee online (in person payment can be made at Info Night)
 - ▷ All fees must be paid before your child can be placed on a team
- ▶ Pay deposit at first practice
 - ▷ All checks can be made out to Prior Lake Robotics
 - ▷ Deposit checks will be collected at the first practice -- must be received before robots are distributed and will be returned, shredded or donated to KINGTeC (per your designation)
 - ▷ **NOTE**- You must be present at the kit turn-in night for your check to be returned (none will be mailed).
- ▶ **AT LEAST ONE PARENT PER PARTICIPANT MUST ATTEND FIRST PRACTICE** (Bring your calendars!)

Core Values

- ▶ **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!*

Coaching Philosophy

- ▶ **The children come first.** FLL is about the children having fun and getting excited about science and technology. Everything my team does starts and ends with this principle.
- ▶ **The children do the work.** This is their opportunity to learn and grow. The children on my team do all of the programming, research, problem solving, and building. Adults can help them find the answers, but cannot give them answers or make decisions

Covid Policy

PLSAS Policy:

<https://www.priorlake-savage.k12.mn.us/about-us/back-to-school-safe-learning-plan>

KING TeC programs will be following the policies and rules of the PLSAS school district in regard to health and safety relating to COVID.

Our intention is to have a fully in person season from start to finish. In the event that PLHS is no longer available for the program, we are preparing alternative plans. This includes sending equipment home (LEGOs, robots, maps, tables, etc.) so the teams can continue to work on their projects. During the 2020-2021 season, High Tech Kids and FIRST made use of the video streaming chat program Discord to allow teams to communicate with each other as well as holding remote competitions. We will be working in a similar manner.

Note that in the event equipment does have to go home with the teams, we will be rolling out forms that one or more adults on the team will fill out to assume liability of the equipment until it is returned to KING TeC.

More details including the policy specifics and forms will be coming soon.

Questions?

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