



Welcome to *FIRST* and FLL JR.!

What's Next?

Two adult coaches must be registered for each team and participate in *FIRST* Youth Protection clearance process. The process includes a background screening. The screening occurs in the TIMS registration system where your team registers for the season. There is no charge for the screening. To learn more about the [FIRST Youth Protection Program](#), please visit the *FIRST* national site.

Who can be on a team: Grades K-3; **Team size is limited to 6 students.**

Registering your Team with *FIRST* (TIMS): <https://www.firstinspires.org/robotics/flljr/cost-and-registration>

Season: The 2017 challenge theme is Aqua Adventure.

Registration & Kit ordering	Open Now!
Challenge released	August 1st
Preparation	August - November
FLL JR. Expo	Mid-November

Costs: (estimated): Costs are usually divided up among the families of the team members. Seek sponsorship!

FLL Jr. WeDo 2.0 Core Set (shipping/taxes not included)	\$250
<i>FIRST</i> Registration	\$99
Total	\$349
Additional optional costs: T-shirts, extra parts, event fee, etc.	\$100 - \$300

Registration Includes:

- Inspire Set – Theme inspired LEGO set used to complete season challenge.
- Challenge Document – Outlines yearly challenge.
- Engineering Notebooks – Used to guide team members through season.
- Team Meeting Guide – Gives complete coach instructions for 12 sessions.

Order the Kit of Parts: This is done on the same site where you registered your team. Special pricing for *FIRST* teams is available only through TIMS. Once your team has their permanent team number(s) and products, you will be able to download the Challenge materials.

Grants: *FIRST* in Michigan FLL Jr: Info on applying for these grants will be available in the Fall.

- Michigan Department of Education: \$100; this is a reimbursement grant.
- FORD Employee mentor grant: \$100; this is a reimbursement grant.

Learn more about the Program and the Season:

- *FIRST* National: <http://firstinspires.org/robotics/flljr>
- *FIRST* in Michigan: <http://firstinmichigan.com/jrfl/index.html>

Build your Team:

- **Main Contact/Coach:** Oversees the day-to-day running of the team, contact person for the team for YPP purposes, *FIRST*/*FIRST* in Michigan/NBot correspondence
- **Alternate Contact/Coach:** Same as above.
- **Host:** The host provides the main workspace for the team. Other meetings can be held at other locations. This will help to alleviate the load on the host.
- **Mentors:** All team member parent(s) should take on a mentor role for the team. Other *FIRST* Robotics teams in your area can also serve as mentors. Reach out to local businesses/professionals to fill specific mentor needs.
- **Team Members:** Team members should be able explore a variety of roles on the team, supported by their coach and mentors.

What's Next?

- Organize!
 - The online registration provides guidelines on how to develop a Show Me poster, Model and provides a Team Meeting Guide. This guide is structured with information on how to organize team meetings and comes with activities and lessons that you can use with your team.
- Establish a Team Communication plan
- Start a Team Calendar
- Set Milestones and deliverables
- Determine a meeting schedule
 - Shorter meetings work well with this age range. Snacks are also always a good idea.
- Divide and Conquer!
- Whole Team: Determine team direction in major areas such as model and project focus. Use the engineering process as a tool to help the team determine their direction in these areas.
- FLL JR teams participate in FLL JR Expos. Expos are a celebration of the season and provide positive reinforcement of the team's accomplishments. Expos are often held as part of FLL/FTC events.
- Need some help?
 - Frog Force members are always willing to help out teams! Email frogforce@frogforce503.org and we will connect you with a student!
 - In the Fall, local workshops at elementary schools may be held. Great way to get focused help as well as connect with other local FLL JR. teams! Watch out for more information
 - The Robot Garage in Birmingham has classes to assist teams. Visit their website: <http://therobotgarage.com/>



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Who can be on a team: Upper elementary students in 4th - 6th grade; **Team size limited to 10**

Register your Team with *FIRST* (TIMS): www.firstinspires.org/robotics/fll/start-a-team

Learn more about the Program and the Season: TONS of resources are available!

- *FIRST* FLL national: www.firstinspires.org/robotics/fll
- *FIRST* in Michigan: <http://www.firstinmichigan.org/fll/index.php>

Season: "Hydro Dynamics" challenge will be released on Aug. 29th on the *FIRST* FLL site.

2017 Challenge Released	August 29
Preparation	August - October
Competition Season	November - December

Order the Team's Kit of Parts: This is done via the TIMS system, where the team registered with *FIRST* for the season. Special pricing for *FIRST* teams is available only through TIMS.

- Robot platform: LEGO Mindstorms EV3. This kit can be reused each year.
- Field Setup Kit: This is the practice field for your robot and it includes an exclusive selection of LEGO bricks, dual lock fasteners, and a roll-out field mat. **A [FLL table](#) (4' X 8') is often constructed by the team; plans are available on the *FIRST* FLL national site.

Cost (estimated): Costs are usually divided up among the families of the team members. Seek sponsorship!

LEGO Mindstorms EV3 Kit (shipping/taxes not included)	\$470
FIRST Registration (annual)	\$225
Field Set up Kit	\$75
Event Entry Fee (paid at event)	\$75
Costs	\$845
Additional optional Costs (extra parts, T shirts, FLL table)	\$150 - \$1,000

Grants: Teams must be officially registered with *FIRST*

- *FIRST* in Michigan FLL: Info on applying for these grants will be available in the Fall.
 - Michigan Department of Education grant: \$200; this is a reimbursement grant.
 - FORD Employee grant: \$200; this is a reimbursement grant.

Build your Team:

- **Main Contact/Coach:** Oversees the day-to-day running of the team, contact person for the team for YPP purposes, *FIRST*/*FIRST* in Michigan/NBot correspondence
- **Alternate Contact/Coach:** Same as above.
- **Host:** The host provides the main robot workspace for the team. Note that the FLL table is 4' X 8'. Other meetings can and should be held at other locations. This will help to alleviate the load on the host. The host and coach may be the same person, although this is not recommended!
- **Parents & Mentors:** All team member parent(s) are expected to take on a support role for the team. Mentors provide assistance to teams in their particular area of expertise. Other *FIRST* Robotics teams in your area can also serve as mentors. Reach out to local businesses/professionals to fill specific mentor needs.
- **Team Members:** Team members should be able explore a variety of roles on the team, guided by their coach and mentors. Team members often choose to specialize in a role on the team. All members should work as a team to achieve team goals.

What's next?

- Organize!
- Establish a Team Communication plan. Google groups are a great tool!
- Start a Team Calendar
- Set milestones and deliverables
- Determine a meeting schedule
- Divide and Conquer! Split up duties and responsibilities among families, mentors, team members
- Whole Team: Determine team direction in major areas such as robot game strategy and project focus.
- Watch for key dates such as the Challenge Release on Aug. 29th and Michigan FLL event registration (this date will be eblasted to all officially registered teams usually in late Sept./early Oct.).
- Need help?
 - Frog Force team members can provide mentorship on a drop-in basis in support of such areas as robot build, programming, project help, teamwork challenges. Email frogforce@frogforce503.org to connect!
 - The *FIRST* FLL national site has extensive resources to help coaches, mentors, team members.
 - The Robot Garage in Birmingham has classes to assist teams. Visit their website: <http://therobotgarage.com/>
- Don't forget about outreach! Share your robot, project, experiences, what you learned at school, in your community, with sponsors.
- Gracious Professionalism and the *FIRST* Core Values are the foundation of *FIRST* Robotics. Learn & live them!
- Have fun!





Welcome to *FIRST* and FTC!

What's Next?

Two adult coaches must be registered for each team and participate in *FIRST* Youth Protection clearance process. The process includes a background screening. This screening occurs in the TIMS registration system where your team registers for the season. There is no charge for the screening. To learn more about the [FIRST Youth Protection Program](#) please visit the *FIRST* national site.

Who can be on a team: Middle School students. **Team size is limited to 15 students.**

Season: 2017-2018 Game Reveal September 9th on the *FIRST* FTC national site.

Game Reveal	September 9th
Build Season	September - November
Competition Season	November - December
Super Regional North (event in Iowa)	March
FIRST FTC Championships	April

Nbot Registration & Kit Rental: In order to lower the cost of entry for FTC teams and create a sustainable middle school FTC program, Nbot through Frog Force offers a team registration and kit rental program. The \$575 (per team) Nbot program fee includes the \$275 annual team registration fee and a \$300 kit rental fee. At the end of the season, your team can choose to return the kit or renew the rental for the following season.

Kit of Parts:

- TETRIX FTC Competition set
- Control Support Set 2
- Electronic Modules & Sensor kit
- Moto G Phones

Field: Perimeter/soft tile mats/game elements (optional but most teams procure at least a few mats & game elements for testing) are available for purchase through [AndyMark](#). DIY perimeter plans are available on *FIRST* FTC site at <https://www.firstinspires.org/resource-library/ftc/game-and-season-info>.

Grants: Teams must be officially registered with *FIRST*

- *FIRST* in Michigan FTC: Info on applying for these grants will be available in the Fall.
 - Michigan Department of Education grant: \$300; this is a reimbursement grant.
 - FORD Employee grant: \$300; this is a reimbursement grant.



Learn more about the Program and the Season:

- *FIRST* FTC National: <http://www.firstinspires.org/robotics/ftc>
- *FIRST* in Michigan FTC: www.firstinmichigan.org/ftc/index.php

Build your Team:

- **Main Contact/Coach:** Oversees the day-to-day running of the team, contact person for the team for YPP purposes, FIRST/FIRST in Michigan correspondence
- **Alternate Contact/Coach:** Same as above.
- **Host:** The host provides the main robot workspace for the team. Note that a full FTC field is 12'X12'; most teams use a partial field due to space constraints. Other meetings can and should be held at other locations. This will help to alleviate the load on the host. The host and coach may be the same person, although this is not recommended!
- **Parents & Mentors:** All team member parent(s) are expected to take on a support role for the team. Mentors provide assistance to teams in their particular area of expertise. Other *FIRST* Robotics teams in your area can also serve as mentors. Reach out to local businesses/professionals as well
- **Team Members:** Team members should be able explore a variety of roles on the team, supported by their coach and mentors. Team members often choose to specialize in a role on the team. All members should work as a team to achieve team goals.

What's next?

- Organize! Start a Team Calendar. Set milestones and deliverables. Determine a meeting schedule
- Establish a Team Communication plan. Google groups are a great tool!
- Divide and Conquer! Split up duties and responsibilities among families, mentors, team members
- Whole Team: Determine team direction in major areas such as robot game strategy and robot design.
- Document everything. The Engineering Notebook is a key element in the eligibility for many awards at events.
- Watch for key dates such as the Game Reveal on Sept. 9th and Michigan FTC event registration (this date will be eblasted to all officially registered teams usually in late Sept./early Oct.).
- Need help?
 - Frog Force team members can provide mentorship on a drop-in basis in support of such areas as robot build, programming, Engineering Notebook, etc. Email frogforce@frogforce503.org to connect!
 - The FIRST FTC national site has extensive resources to help coaches, mentors, team members.
 - The Robot Garage in Birmingham has classes to assist teams. Visit their website: <http://therobotgarage.com/>
- Don't forget about outreach! Share your robot, experiences, what you learned at school, in your community, with sponsors.
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