



HOWELL HIGHLANDER ROBOTICS *FIRST*® LEGO® League (FLL), IS A SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH PROGRAM FOR STUDENTS IN GRADES 3 THROUGH 5

WHAT DOES A *FIRST* LEGO LEAGUE TEAM DO?

Each year *FIRST*® releases a new **FLL Challenge** for our teams. The Challenge is released in late August and focuses on a different scientific topic or question each year. You don't need to wait until September to get started though. Knowing what to expect will help your team hit the ground running. The Challenge has three parts: the **Robot Game**, the **Project**, and the **FLL Core Values**.

THE ROBOT GAME

In the Robot Game, the students plan, design, build and program an autonomous (no remote control) robot using LEGO MINDSTORMS® technology. The robot has two and a half minutes to score as many points as possible by performing mission tasks inspired by the Challenge theme. Missions require the robot to navigate, capture, transport, deliver, or modify LEGO objects using a 4'x 8' table and playing field.



THE PROJECT

Through the Project, teams learn more about the science behind the Challenge theme. The students use their creativity to design a solution (or modify an existing one) to solve a real-world problem. *FIRST*® gives you a head start by announcing the theme several months ahead of time. Even though you will not know the exact details of the Challenge, you can begin researching the theme with your team as soon as it's announced.

THE CORE VALUES

While FLL teams work on the Robot Game and the Project each year, they are guided by the FLL Core Values. The Core Values are part of what makes FLL so special, because students learn positive ways to respect their teammates, coaches, and even their "competitors." Our last, and most significant Core Value, is "We have FUN!"



PREPARING FOR A TOURNAMENT

Teams meet one to three times a week to work on the Robot Game, Project and Core Values starting in late August. In Michigan, all teams are invited to celebrate their accomplishments at one FLL Qualifying Tournament held in November or December. It is a friendly competition that emphasizes what a team has learned and accomplished. About 25% of the teams are invited to compete at the Michigan FLL State Championship in December.

WHO IS A COACH? A coach is any adult willing to facilitate the thrills and spills of technology and fun with kids. No technical background necessary. Howell Highlander Robotics provides mentor guidance and team support for all their mentors and coaches. To become an FLL coach, please contact Kim Portuesi at kmportuesi@comcast.net. For more information about Howell Highlander Robotics and our progression of teams, visit www.scotsbots.org.

