



# Welcome to the FIRST® LEGO® League Nashville Qualifier Tournament

On behalf of The Ensworth School, let me be the first to welcome you to the FLL Nashville Qualifier Tournament. We look forward to seeing how the teams attending at this event work together to solve this year's challenge and we promise to work diligently to model FLL Core Values in the advancement of top performing teams to the East Tennessee Championships in February.

This manual contains information that will be useful to you as you plan your tournament trip. Please review it carefully to ensure you are fully prepared. If you have any questions, please feel free to contact the tournament director. Contact information is provided in the manual.

**Tournament registration is being handled electronically by the FLL team and event registration website. When you register for our event, a confirmation email is sent to you. If there are less than 32 teams registered in the Nashville region, all local teams will be accepted and the remaining spots will be offered to teams outside of our region. If there are more than 32 teams registered in the region, then Nashville area teams will receive preferred acceptance. If there are more than 32 Nashville area teams, we will use a lottery process to choose teams for acceptance. Teams not chosen by the lottery will be waitlisted for any team cancellations.**

**Please be sure to download the Release and Consent Form from the FLL website. A copy of this form must be completed and submitted for each team member, coach, and mentor.**

Again, welcome to the Nashville Area Qualifying Tournament and best wishes for an exciting and successful FIRST LEGO League experience.

Keith B. Crowe  
Tournament Director

## CONTENTS

Sponsors	3
Tournament Contact	3
Tournament Date and Schedule	4
Location and Directions	4
Parking	4
Tournament Day Check-in	4
Team Size	5
Adult Supervision Requirement	5
Security of Team Equipment and Personal Items	5
Pit Areas and Practice Tables	5
Team Banners, Posters, and Stickers	6
Tournament Schedule of Events	6
Robot Performance Rounds	6
Team Research Presentations	6
Technical Interview and Teamwork Interview	7
Judges and Referees	7
Allowable Parts and Software	7
Awards	8
Lunch	8
Accommodations for Persons with Special Needs	8
Requirement for Release and Consent Forms	8
Safety and Security	9
Additional Information	9

# FIRST LEGO League Nashville Qualifier Tournament

## SPONSORS

The FIRST LEGO League Nashville Qualifier Tournament is sponsored by Ensworth School. Ensworth School is a Pre-First through Twelfth Grade coeducational, independent school that provides challenging academics, small classes, and a nurturing learning environment at all grade levels.

In the lower grades, robotics is integrated into the science curriculum and provides valuable experience in programming and engineering while studying life, earth, and physical sciences.

Ensworth supports and encourages the growing number of robotics teams and clubs in the Nashville area, and looks forward to providing a forum for sharing the accomplishments of these talented young people.

The Nashville Qualifier would also like to recognize the generous support of Charles Spencer and the Community Foundation of Greater Chattanooga. Mr. Spencer's commitment to helping grow educational robotics programs in East Tennessee is very much appreciated.

## TOURNAMENT CONTACT

Keith B. Crowe  
Tournament Director  
Math/Science Department Chair  
Ensworth School  
211 Ensworth Avenue  
Nashville, Tennessee 37205

School Phone: (615) 383-0661  
School FAX: (615) 269-4840  
Cellular Phone: (615) 293-0934  
Email: [crowek@ensworth.com](mailto:crowek@ensworth.com)

## TOURNAMENT DATE AND SCHEDULE

### Saturday, December 3, 2016

NOTE: All times shown are Central Time. The starting time for team setup and the opening ceremony are fixed. All other times are subject to change and depend upon the total number of participating teams. A final schedule will be provided to each team coach on tournament day.

7:30 AM	Check-in, Team Setup, Practice
8:15 AM	Mandatory Coaches Only Meeting (Ingram Library)
8:40 AM	Opening Ceremony (Frist Hall)
9:00 AM	First Round Competition Begins
9:40 AM	Break
10:00 AM	Second Round Competition Begins
10:40 AM	Break
11:00 AM	Third Round Competition Begins
12:00 PM	Lunch Break
2:30 PM	Awards Ceremony

## LOCATION AND DIRECTIONS

Ensworth School  
Red Gables Campus (Lower School Campus)  
211 Ensworth Avenue  
Nashville, Tennessee 37205

### **Directions to Ensworth's Red Gables Campus (Grades P1-8) on Woodlawn Drive at Ensworth Avenue.**

Exit I-440 at West End. Proceed west on Harding Road / West End away from town past St. Thomas Hospital. At the traffic light at Woodlawn Drive, turn left (south). Woodlawn Drive dead-ends into the school at the first stop sign.

## PARKING

Parking at Red Gables will be tight on the day of the competition and all teams are encouraged to carpool. You may park in the lower lot next to the athletic center, in the lot directly in front of the school, or in the side lot along Ensworth Ave. **Please do not park on the street.** Please inform the security officer on duty in front of the school if you have trouble finding a spot, and they will help you out.

## TOURNAMENT DAY CHECK-IN

Ensworth School will be open at 7:30 AM on Tournament Day. Coaches should report to the registration table and teams should proceed directly to the pit area. The registration table will be located just inside the marked front entrance to the school. Nametags, a final schedule, pit assignments, and other information will be issued. To avoid congestion at the entrance, volunteers will be stationed near the entrance to direct teams to their pit locations.

## TEAM SIZE

Teams are limited to a maximum of ten (10) members, excluding coaches and mentors. Teams are expected to observe this limit so we can avoid overcrowding in the pits and prevent disappointments when medallions are distributed. Teams will receive one medallion for each team member, up to a maximum of ten.

## ADULT SUPERVISION REQUIREMENT

All teams must be accompanied at all times by at least one adult coach or assistant coach, and the coach must remain at the tournament site throughout the day. Unsupervised teams will not be allowed to compete.

## SECURITY OF TEAM EQUIPMENT AND PERSONAL ITEMS

The sponsors cannot accept liability for lost or damaged items. Please make sure that someone on your team monitors your team equipment and personal items.

## PIT AREAS AND PRACTICE TABLES

Pit areas will be located in Patton Hall (a tournament facility map will be provided at check-in). Each team will be assigned a pit area and an electrical outlet. Each team pit area will be marked with a placard identifying the team number and nickname. To facilitate locating teams by event volunteers and judges, teams should occupy the pit areas that are assigned and should not relocate themselves during the check-in process. Practice tables, identical to the competition tables, will be available throughout the day. Volunteer "Pit Bosses" will be stationed in the pit area and at the practice tables to provide assistance and manage access. Practice time will be limited to five minutes when other teams are waiting. **No food or drinks are allowed in the pit and practice table areas.**

Teams from the same organization will not perform together. To facilitate this, teams from the same organization will be physically separated in the pit area. If teams must share equipment, such as a computer or a video projector, it's important to communicate this as early as possible to tournament organizers. If you have a team member or coach that needs a pit location accessible for a wheelchair, please send an email describing your needs to Keith Crowe ([crowek@ensworth.com](mailto:crowek@ensworth.com)).

## TEAM BANNERS, POSTERS, AND STICKERS

Teams are encouraged to bring a team banner or poster to mount on the walls in the pit area only. This is an excellent way to display team spirit and identify your team for the judges and spectators.

Tape will be provided for mounting banners and posters on the wall. Please limit banners and posters to a maximum size of 4' by 4'. **No posters, flyers, or signs should be posted outside of the pit area by any team. As a result of facility damage at previous tournaments, stickers are prohibited.**

## **TOURNAMENT SCHEDULE OF EVENTS**

A final schedule of tournament events will be provided to each team coach during check-in. During the tournament each team will participate in three (3) Robot Performance rounds, make their Research Project Presentation and be interviewed for Robot Design, and Teamwork.

## **ROBOT PERFORMANCE ROUNDS**

The Robot Performance area is located in the Frist Hall auditorium. There will be two pairs of tables set back-to-back; a total of four tables. Two tables will be numbered 1 and 2. The other two tables will be numbered 3 and 4. Two teams will perform at the same time.

Teams will be participating in the performance rounds according to their pit position. Tournament volunteers will escort teams to the on-deck area five minutes prior to the start time. When the referees signal that everything is ready, the teams will be escorted to the competition tables and given approximately one minute to prepare and place their robots. At the end of the setup period, the referees will start the 2½-minute competition period. At the end of the competition period, the referees will determine scores and tell the teams when to retrieve their robots and exit the competition area. Only two team members may stay at the table while the robot is attempting a mission. Other team members must remain behind a line on the floor. If a team is not prepared to compete at their assigned time, they will forfeit that round. A team's best score out of the three competition rounds will be used for performance award determinations. Performance rounds will be conducted in accordance with the rules and standards published in the FLL Team Manual, including any changes and modifications that have been posted on the Official FIRST<sup>SM</sup> LEGO<sup>®</sup> League web site.

## **TEAM RESEARCH PROJECT PRESENTATION**

Team research presentations will be held in an informal setting with only team members, team coach, and judges present. Teams should be prepared to make their presentations at the time published in the final competition schedule provided on the day of the event. Each team will have a maximum of 10 minutes to setup, deliver their presentation, and discuss their research with the judges. Presentations should not be longer than four to five minutes to allow plenty of time for discussion with the judges. An overhead projector and screen will be available for teams that want to use transparencies. Posters and other visual aids may also be used. After completing the team research presentation, teams can return to the pit area.

**Note:** Video presentations are discouraged due to the excessive setup time required. If a team wants to use video presentation materials, such as PowerPoint, they must provide the computer, projector, cart, and extension cord. No additional setup time will be allowed.

## **TECHNICAL INTERVIEW**

Teams should be prepared to make their Technical Interview at the time published in the final competition schedule provided on the day of the event. Teams must bring their robot, with all mission attachments, and a printed copy of their RCX, NXT or EV3 programs to the technical interview. Teams should seek out the programming judge and give their printed programs to the judge. The technical interview provides an opportunity for each team to meet with technical judges, demonstrate their robot, and discuss its design. A maximum of ten minutes will be allowed for each team. After completing the technical interview, teams can return to the pit area.

## **CORE VALUES INTERVIEW**

Teams should be prepared to make their Core Values Interview at the time published in the final competition schedule provided on the day of the event. Teams should report to the corresponding Teamwork Interview judge with their Core Values Poster and any other presentation materials. After completing the teamwork interview, teams can return to the pit area.

## **JUDGES AND REFEREES**

The judges are looking forward to meeting the teams, hearing team research presentations, and watching robots perform. Each team should be prepared to share their experiences with the judges and discuss the design of their robot. The referees are looking forward to providing teams with the best possible opportunity to demonstrate their robots during the competition rounds. Please give the judges and referees your complete attention and cooperation. Also, please keep in mind that the decisions of the referees are final and there are no provisions for protest or appeal.

## **ALLOWABLE PARTS AND SOFTWARE**

At any time during the tournament, the judges and referees may inspect robots to determine if they comply with the allowable parts and software rules as stated on the Official FLL website.

## **AWARDS**

Each team member will receive a FIRST LEGO League qualifier event pin for participating in the program. In addition, numerous team awards will be presented at the qualifier tournament. Awards in the following categories will be presented:

- Champion's Award
- Robot Design Awards
- Project Awards
- Robot Performance Award
- Core Values Awards

It is the aim of the tournament to distribute awards as equitably as possible among the teams, with the goal of no team winning more than two awards of the required FLL core awards at a qualifier tournament. A team can only win a second award if one of the awards they win is for Robot Performance.

## **LUNCH**

Concessions will be located in the Robinson Dining Hall and the Brown Athletic Center throughout the day. Moe's and Chick Fil A will be sold as well and drinks, chips, and other snack foods. While there are several restaurants located within two miles of the campus, teams are encouraged to remain on campus during lunch to avoid parking hassles.

## **ACCOMMODATIONS FOR PERSONS WITH SPECIAL NEEDS**

Please contact the tournament director as soon as possible if anyone attending the tournament with your team requires special accommodations.

## **REQUIREMENT FOR RELEASE AND CONSENT FORMS**

**A copy of the official Release and Consent Form must be submitted for each team member, coach, and mentor. These forms must be received no later than November 30, 2016. This is a FIRST policy. Teams that do not submit forms will not be allowed to participate in the tournament.**

## **SAFETY AND SECURITY**

Child safety is paramount to all of us involved with young people. Due to the age of the participants in the FLL program, you the parents and guardians are essential to their safety. Please educate your child about how to recognize situations that may put them at risk, as well as what things they can do to protect themselves such as always having a companion.

We know you take measures to ensure that you are comfortable with the adults working with your child's FLL team. Beyond the FLL team meeting environment, where you interact with the adult volunteer(s) over a long period of time and can make these judgments directly, there are FLL events with volunteers interacting with your child for one day. In this case it is essential that you educate your child about basic safety practices. For example: the importance of staying with their team or at least in pairs at all times and not leaving the venue except with you, their parent/guardian, or perhaps the team's coach or mentor, if agreed to by their parent/guardian.

## **ADDITIONAL INFORMATION**

Shortly after registration for this event has closed on October 31, 2016, supplementary materials including a site map and evaluation rubrics for all judged events will be emailed to the contact person provided at registration.

If you require assistance finding hotel accommodations close to Ensworth, please contact the tournament director.