

Lower Elementary

**FIRST
LEGO
LEAGUE**

EXPLORE

Upper Elementary

**FIRST
LEGO
LEAGUE**

CHALLENGE

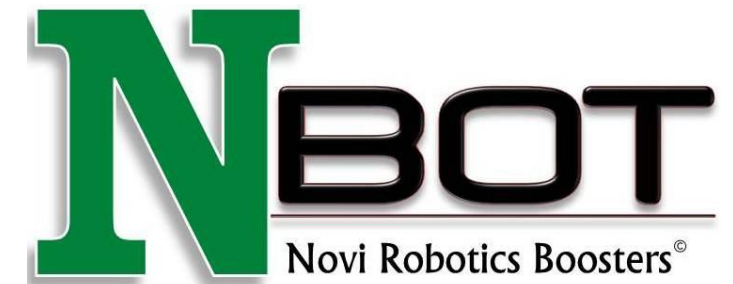
Middle School

**FIRST
TECH
CHALLENGE**

High School

**FIRST
ROBOTICS
COMPETITION**

2026 **FIRST**[®] **ROBOTICS** **INFO NIGHT**



WHAT IS *FIRST*®?

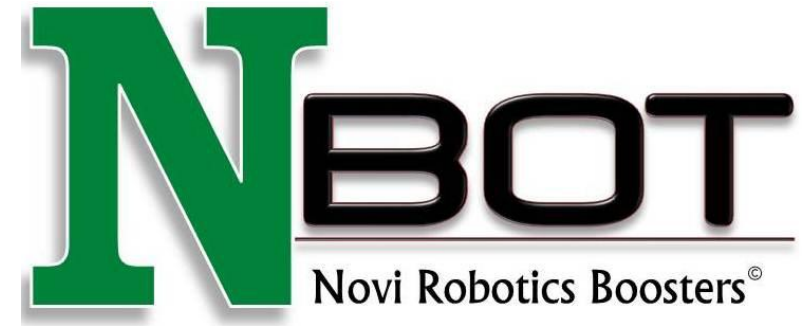
FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

- Promotes interest in STEM among students
- Hosts competitive robotics competitions
- Teaches technical, business, and life skills
- Encourages community outreach and promotion of STEM by teams
- Over **\$80 MILLION** in FIRST-specific scholarships

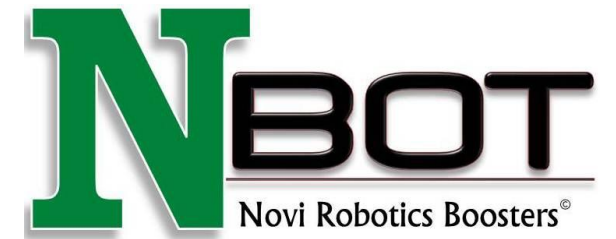


WHAT IS NBot?

- Created in 2012
- To grow the Progression of FIRST Programs in Novi
- 100% volunteer-driven
- Administers K-8 teams
- Provides student mentors and workshops
- Facilitates grant processing through NCSD
- Provides a way for teams to receive support from sponsors through NCSD



FIRST ROBOTICS HIERARCHY



- firstinspires.org
- Program information
- Program resources

- firstinmichigan.org
- Administers programs in MI
- MI Specific information
- Events/Competitions

- frogforce503.org
- Student/Team Registration
- Grant/Sponsorship processing
- Mentorship & Local Resources

Novi High School Robotics

- This meeting will **not** provide in-depth information for the High School **registration** process
- Interested incoming 9th graders should attend the high school meeting

High School
Attend the information
session on May 28th at
6:30 PM

FIRST IN MICHIGAN PROGRESSION OF PROGRAMS

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**FIRST
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COMPETITION**





2025/26 COMPETITION THEME

FIRST AGE

PRESENTED BY Qualcomm



UNEARTHED™



DECODE

PRESENTED BY RTX



REBUILT™

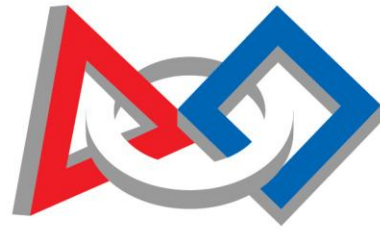
PRESENTED BY HNS
Global Health Foundation



2026/27 COMPETITION THEME

The upcoming season is yet to be released, and information will be passed out following the Worlds Robotics Championship.





**FIRST
LEGO
LEAGUE**

EXPLORE

Grades K-3

| Age Group | Kickoff | Season Ends | Team Size | Cost/Student |
|------------|----------|-------------|------------|--------------|
| Grades K-3 | August 4 | Mid Dec | 6 students | \$125 |





**FIRST
LEGO
LEAGUE**

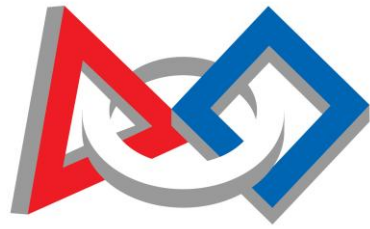
EXPLORE

Grades K-3

- Two-part focus:
 - Explore a challenge that scientists face today
 - Design and build a model to describe the challenge
- Learn basics of programming with LEGO Spike Essential kit
- Create a Show-Me poster and learn to use presentation skills
- Share at end of season Expo
- Encourage a culture of sharing and learning



Teams use a meeting guide and engineering notebooks to explore and plan their season.



**FIRST
LEGO
LEAGUE**

CHALLENGE

Grades 4-6

| Age Group | Kickoff | Season Ends | Team Size | Cost/Student |
|------------|----------|-------------|-------------|--------------|
| Grades 4-6 | August 4 | Mid Dec | 10 students | \$175 |



- **Design, build, and program** a robot using LEGO Spike Prime kit to perform missions on a themed table-top playing field (Robot)
- Present a **innovation project** centered on real-world theme (Project)
- Learn and demonstrate the **FIRST Core Values** (Values)
- Teams will attend one local Qualifier in fall, possible advancement to States in December



A meeting guide, engineering notebooks, coach training, team workshops and mentoring provide teams support throughout the season.

- **Innovation Project**

- **Identify a real-world problem** based on the season's theme
- **Research** the topic and existing solutions
- **Design** an innovative solution
- **Share** your solution with others
- **Refine** your solution based on **feedback from professionals**
- **Present** your research and solution at competition

HLU



- **FIRST 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!



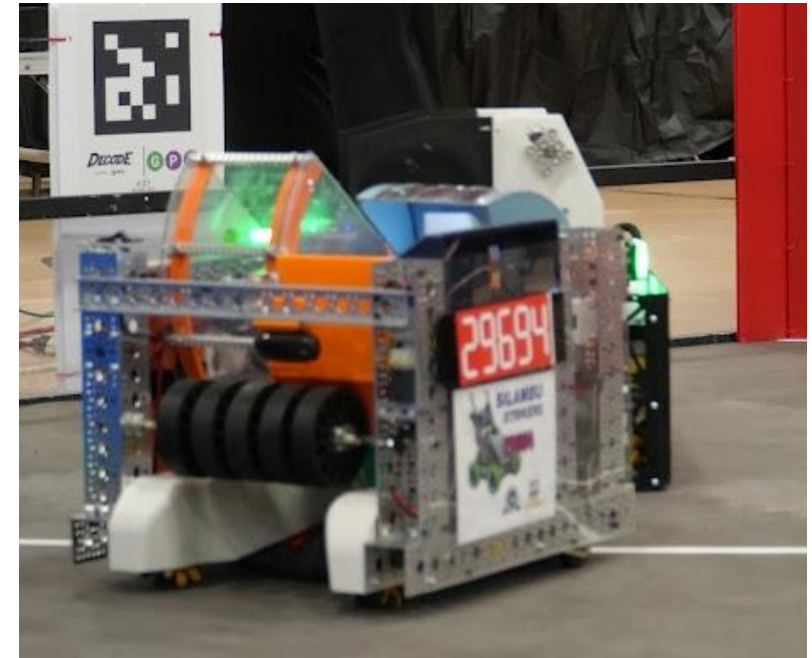
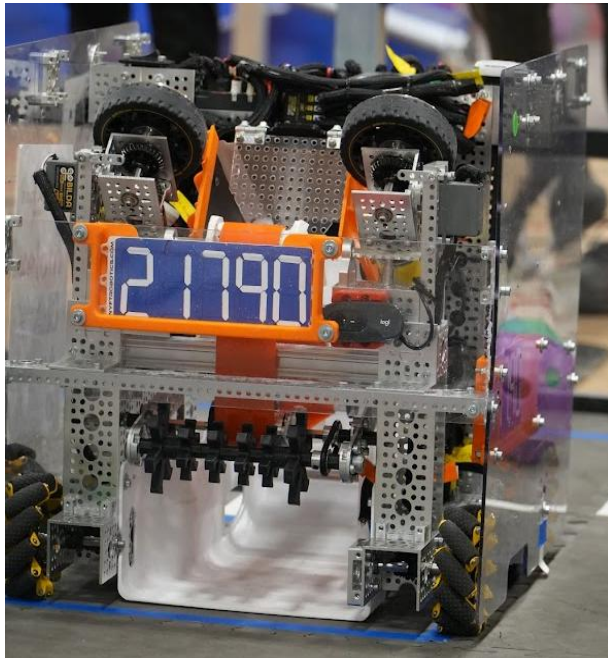
At competition, demonstrate how your team has implemented FIRST Core Values.



FIRST TECH CHALLENGE

Grades 6-8

| Age Group | Kickoff | Season Ends | Team Size | Cost/Student |
|------------|---------|-------------|-------------|--------------|
| Grades 6-8 | Sept 12 | Late Dec | 15 students | \$300 |

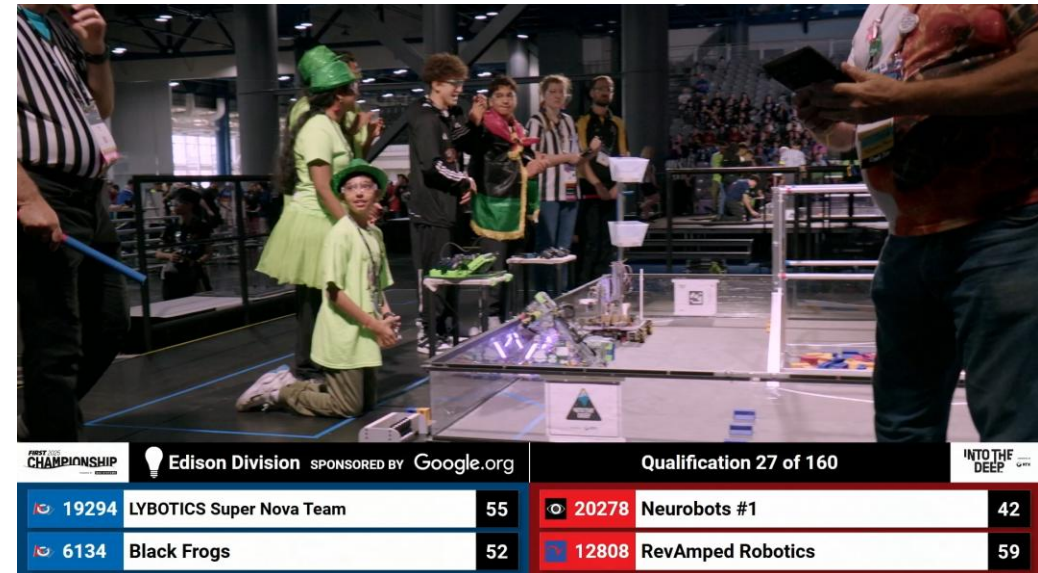




FIRST TECH CHALLENGE

Grades 6-8

- Teams design, build, and program an 18"x18" robot to compete on a 12'x12' playing field
- 2 v 2 sports-like competition with judges, refs, and awards
- Platform uses a standard robotics kit, control system with the option of Java Programming or Google Blocks
- Teams attend two qualifiers in fall, possible advancement to States in December, and possible advancement to worlds in Spring

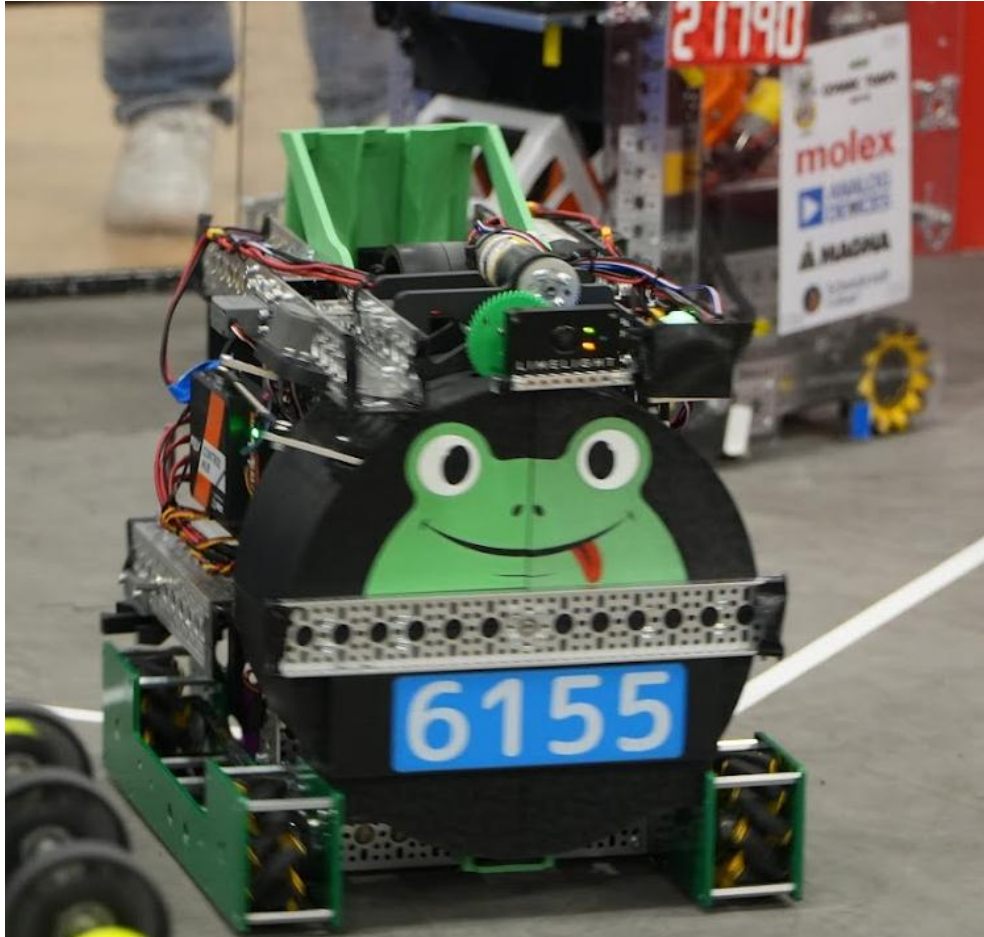


Design and programming workshops along with team mentoring provide support throughout the season.



FIRST TECH CHALLENGE

Grades 6-8



- Robot build season:
 - September – October/November
- Build Materials
 - REV/GoBilda
 - Electrical components
 - Greater freedom in material use
 - 3D print
- Program using Java or Python
- Will take 6-8 weeks
- Offseason work is crucial to team success
 - Learn programming
 - Practice build
 - Attend workshops



FIRST TECH CHALLENGE

Grades 6-8

- Outreach consists of helping the community and spreading STEM/FIRST awareness
- Real-world business experience through Sponsorships
- Competition Materials/Things to Expect:
 - Judging: Robot, Outreach, Core Values, etc.
 - Engineering Portfolio (for judging)
 - Engineering Notebook (documenting season)
 - Awards and advancement based on judging in addition to robot performance!!!

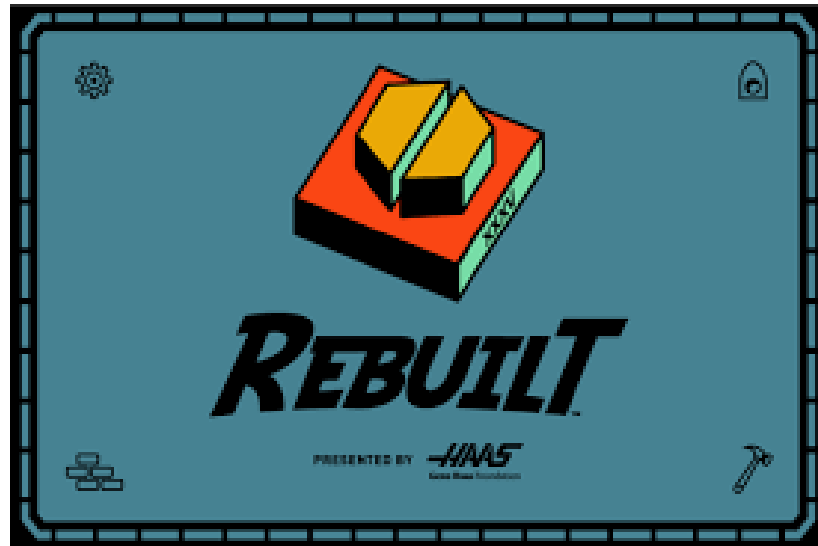




FIRST ROBOTICS COMPETITION

Grades 9-12

| Age Group | Kickoff | Season Ends | Team Size/Cost |
|-------------|------------|---------------------------|----------------|
| High School | January 10 | End of April (Year-round) | Varies |





FIRST ROBOTICS COMPETITION

Grades 9-12

- Perform sport-like tasks on arena floor with large remote-controlled robot built from custom parts
- Kit Of Parts valued at over \$15,000
- Mentors work side-by-side with students
- Competitions are 3 v 3 with random pairings, until elimination rounds. Top seeded teams draft partners to play in elimination rounds.
- Community Outreach
- Two High School teams



Coach/Mentor Roles

Potential Parent Roles:

- Host
- Coach
- Build or Programming Mentor
- Innovation Mentor
- Treasurer
- Administration
- Outreach Mentor

- Desire to work with children
- Willingness to learn along with team
- Inspire not Educate
- Brings technical or nontechnical expertise to the team
- Help the team set realistic goals
- Facilitate meetings and coordinate work
- Relay guidelines and game rules
- Encourage kids to take risks and invent
- Students do as much of the work as possible
- Opportunity to make choices and apply any learnings
- Model respect for every team member and his/her ideas

Coach & Team Resources



FIRST Lego League

- Meeting guide and engineering notebooks
- Coaches meeting with experienced coaches
- Programming workshops for Challenge teams
- Kickoff event for Challenge teams
- Student to student mentors throughout the season
- Rookie competition workshop for Challenge teams

FIRST Tech Challenge

- Coaches meeting with experienced coaches
- Kickoff event with design, programming and judging workshops
- Advanced programming workshops
- Student to student mentors throughout the season



Summer Camps

at the Novi Robotics Center



FLL Camp

Hands-on robot building, coding, and teamwork designed to help students strengthen their skills, and build confidence in a fun and supportive environment.

Grades: 3-6

When: July 20-24
8:00am-12:00pm

Cost: 200\$



Girls FTC Camp

Hands-on robot building, programming, and teamwork. It's a fun, supportive experience designed to inspire girls to explore STEM and build confidence.

Grades: 6 - 8

When: June 8 - 12
8:00am - 12:00pm

Cost: 200\$



FTC Camp

Hands-on robotics and teamwork in a fun, supportive camp that inspires all students to explore STEM and build confidence.

We will offer this program if there is enough interest from students and families.



Sign up for all camps here

No prior experience required for any camps

Please feel free to contact us at frogforce@frogforce503.org

Novi Robotics Summer Camps

- **FLL Camp**
 - Grades 3-6
 - July 20th-24th, 8AM to 12PM
 - \$200
- **Girls FTC Camp**
 - Grades 6-8
 - June 8th-12th, 8AM to 12PM
 - \$200
- **FTC Camp**
 - TBD
 - Please sign up if interested

Next Steps:

- K-8th, Register your student with GoFan
- Register by program
 - Robotics - FIRST LEGO League Explore (Grades K-3)
 - Robotics - FIRST LEGO League Challenge (Grades 4-6)
 - Robotics - FIRST Tech Challenge (Grades 7-8)
- Participation fees fund the team expenses
- Select your parent role on the team
- Must register even if returning, informal arrangements with team coaches are not sufficient
- Coaches and Hosts are needed to form teams
- Team Formation Meeting June 4 (Novi Robotics Center)
- Coaches Meeting June 22 (Novi Robotics Center)

Discover

FLL Discover will not be offered this year onwards.

High School

Attend the information session
May 28th, 6:30 PM at Novi High School



CONTACT INFO

*Questions?
Comments?
Concerns?*



frogforce



frogforce503.org



NBot@frogforce503.org

K/8 Register by May 25th!

Don't Delay. Register Today!

FIRST Progression and Mentor Roles

