TO JOIN THE HOT TEAM

Full-time students grades 9-12 attending Milford High School, Lakeland High School, and International Academy - West Campus are invited to apply.

Academic Eligibility

I Minimum 2.75 GPA and passing all classes

Travel Eligibility

- I Participation in Jan-Feb Build Season
- At least 15 hours of team community service

Financial Obligations^{*}

- I Participation and Build Fee
- I Uniform Fee
- Travel Fee (not required for those choosing not to travel with the team)

*Financial assistance is available for eligible students

Application

- I Interested students may apply in June
- The new team member information meeting date and our application can be found on our website:

www.hotteam67.org

Not an HVS student? There are many teams across the nation. Find one near you at: https://www.firstinspires.org/team-event-search



FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY

"... to create a world where science and technology are celebrated... where young people dream of becoming science and technology heroes..."

— Dean Kamen. FIRST Founder

HOT Team Sponsors:













Check Us Out!



The Hot Team participates in the *FIRST*Robotics Competition





HEROES OF TOMORROW



FRC TEAM #67

www.hotteam67.org





The Build Season

The build season is a 6-8 week period that begins the first week of January when the season's game is unveiled by *FIRST*. The team then uses the remaining build season weeks to conceive, design, develop, and build the robot and to develop any required supporting documentation and award submissions. The team completes this work at the General Motors Milford Proving Ground (GMPG). There, they break into the following smaller task-focused groups to efficiently accomplish their tasks alongside professional mentors.

 Media and Marketing: Documents, markets, and creates the imagery of the HOT Team. This includes maintaining the team website and social media presence, updating parents on

activities, designing competition t-shirts, and authoring competition award submissions.



- Computer Aided Design and Documentation: Uses SolidWorks, OnShape AutoDesk Inventor, or AutoCAD to produce 3D and 2D design for the HOTBOT. They also collect and create documentation regarding the HOTBOT engineering features to submit for judging at the regional and championship competitions.
- Electronics & Controls: Wires and creates control systems for the HOTBOT. This group gains experience in everything from DC circuits to feedback control with potentiometers, encoders, digital cameras, accelerometers, gyroscopes.



- Machining: Produces components for the HOTBOT and practice playing field at the GMPG machine shop using the lathe, vertical mill, CNC router and waterjet.
- Programming &
 Controls: Programs
 the control system
 behavior of the
 HOTBOT, our
 community service
 robot CASEY, Driver



Station Dashboard, and Scouting APP. Coding is done in JAVA and/or LabVIEW. The competition HOTBOT uses instructions for both operator-controlled and autonomous behavior.

Mechanical Build:

Assembles manufactured and off-the-shelf parts to make our practice field, competition robot, and other needed items.



The Competition Season

The competition season begins in March with the first local competition and ends in mid-April after the World Championship Event. The team typically participates in two local district competitions, the state championship, and the *FIRST* World Championship Event. The members of the HOT Team are assigned specific roles for the competition season as follows:

Entire Team: The HOT Team and each individual team member must demonstrate the HOT Team spirit. We function as a team at all times. We demonstrate sportsmanship and gracious professionalism both on and off the playing field.

Drive Team: The drive team manipulates the robot and plays the game during competition. This team will be chosen for their skill, their ability to



listen to the drive team coach,

their ability to execute the team's strategy, and their demonstration of gracious professionalism under pressure.

Pit Crew: The pit crew keeps our robot in working order during the competition and helps other teams maintain and troubleshoot problems with their robots. This team consists of students who have demonstrated a willing attitude, have read and have ready knowledge of all the *FIRST* robot rules, keep cool under pressure, demonstrate an orderly work habit, and have detailed knowledge of every subsystem on the robot. Broad knowledge of the robot as an electromechanical system is essential for diagnosing problems. The pit crew must demonstrate good communication skills to effectively describe our robot at competitions.

Strategy & Scouting: The strategy and scouting

team determines the best strategy for winning the competition and communicates that to the drive team coach. All team members who are not part of the drive



team and pit crew will be responsible for scouting. They are responsible for scouting other teams to gain information about the robots' abilities and success rates and organize this information so that it is easily accessible and ready for use during the competition.