



Team 3176
Purple Precision

Parents Meeting

27 September 2022

Agenda



- Introductions
- Team 3176 / *FIRST* Robotics - *What's it all about?*
- Schedule
- Competition
- Budget
- Team Uniforms
- Sponsorship
- Varsity Team Letter
- Volunteer Opportunities
- Q&A



Introductions



Team 3176 represents Brownsburg High School in the series of *FIRST* Robotics Competition (FRC)

For Inspiration & Recognition of Science & Technology

Varsity-level **competitive team** (*not a club*) led by the Student Advisory Board (SAB) & guided by Team Co-Sponsors & Mentors



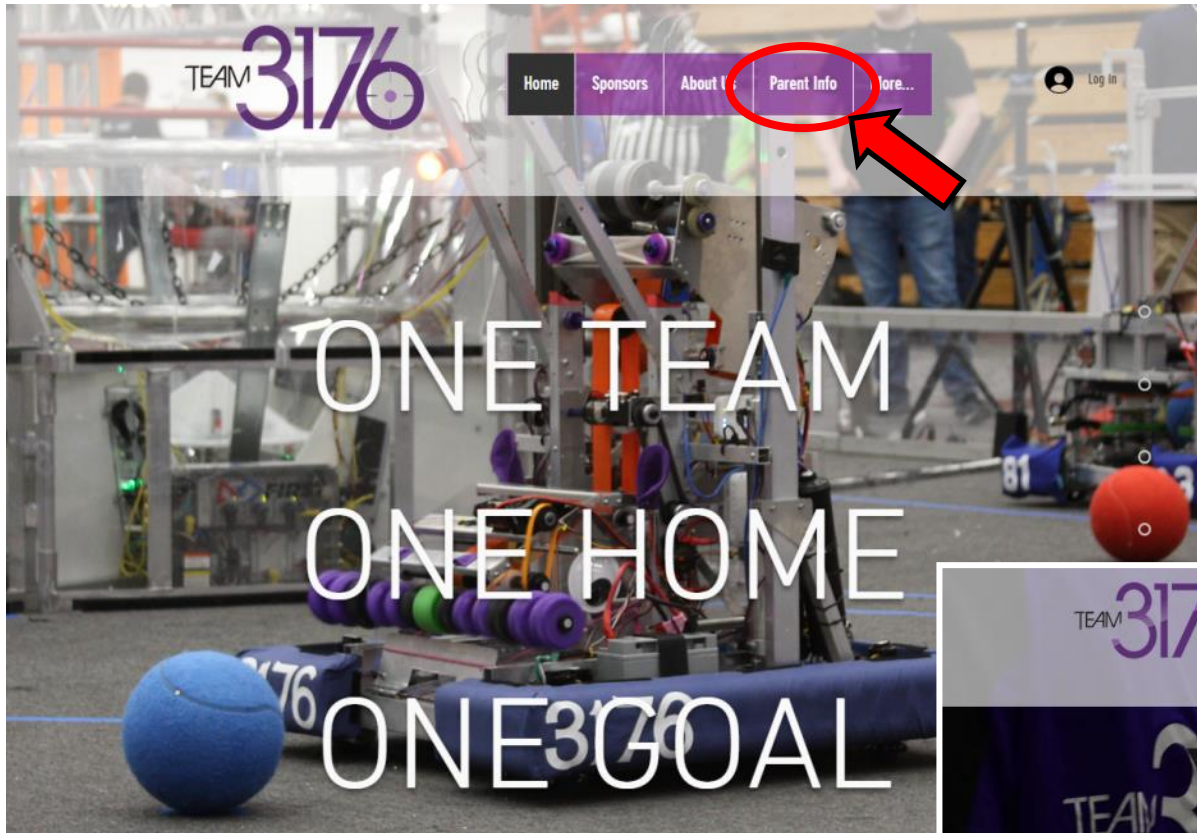
TEAM **3176** PURPLE PRECISION

Who are we?

- Rookie season in 2010
- Overlap with PLTW topics but different in key aspects
 - **Student-led, small-business** mentality, **real-world experience** in a time-critical environment, **student initiative** critical
 - Sustainability – Researching / Learning Best Practice / Documenting
- Comprised of ~50 students & ~10 mentors working in sub-teams
 - Mechanical Design / Fabrication
 - Electrical / Programming
 - Business Ops / Finance / Marketing
 - Community Outreach / Logistics
 - Multi-Media / Graphic Design



Team Website (incl Calendar)



www.team3176.com



FIRST Organization



FIRST estimates in 2019-2020, the programs reached over 679,000 young people worldwide.

8,500+ FRC Teams in 2021

95,000+ Participants (Grades 9-12) from 35 countries

Over \$80 million in scholarships opportunities

<http://firstinspires.org>



GRADES
PreK-8

AGES
4-16



GRADES
7-12

AGES
12-18



GRADES
9-12

AGES
14-18



Team 3176 Yearly Schedule

Off-Season – August to December (1-2 mtg / wk)

Preparation for Build (Skills, Funds, Plans)

Off-season events

Boiler Bot Battle (Oct 15), RAGE (Oct 22)

FRC Kick-off – **7 January 2023** (Saturday)

Build Season - January to March (4-5 mtgs / wk)

Competitions - March & April

District, State, Worlds

Close Out – May

Planning – May - July





Competition Schedule

- **2023 District Competitions (2 of 4)**
 - Mar 4-5 (Sat/Sun) – Penn HS (Mishawaka)
 - Mar 11-12 (Sat/Sun) – Princeton HS (~Evansville)
 - Mar 25-26 (Sat/Sun) – Jefferson HS, (Lafayette)
 - Mar 31-Apr 1 (Fri/Sat) – Center Grove HS, (Greenwood)
- **2023 Indiana State Championship**
 - Apr 8-9 (Sat/Sun) – Anderson University (Anderson)
- **2023 FIRST Championships**
 - Apr 19-22 (Wed-Sat) - Houston

} BHS
Spring
Break
(mid / last)



PRESENTED BY Qualcomm



PRESENTED BY **HINAS**
Gene Haas Foundation



Robot Competition – Charged Up



- 3v3 alliance competition (red / blue)
- Match Timing
 - 0:15 Autonomous
 - 2:15 Tele-Op
- Qualification & Elimination Rounds

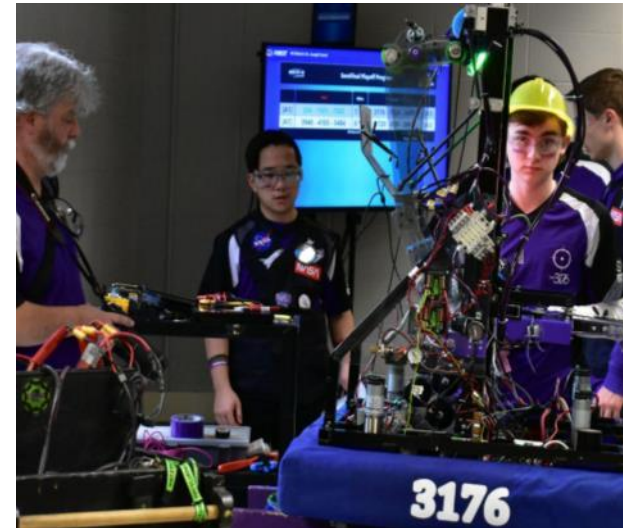


PRESENTED BY Gene Haas Foundation



Past Build Seasons

- Video summaries published weekly
- More use of CAD *before* fab & assy
 - Several design iterations before cutting metal
- **Swerve** drive v4.0! – complex drive system
- Investment in *re-usable* components
 - Most of Robot Hardware / Inventory budget is usable on future robots
- Built **two** robots
 - Test out design concepts on “practice” robot
 - Refine for “competition” robot



2022-23 Team Budget Projections



- This year's budget (~\$35,000) is expected to be similar to previous years with full competitions
- Base Student Fees for 2022-23 will be **\$350**
 - **Due 14 November 2022** – *take time to make sure the team is the right fit*
 - New team member uniform fee is **additional \$65**
 - Sibling fees are \$300 if a family has multiple students on the team
 - Addl Transportation/Logistics for State or Worlds Competition may be assessed if team qualifies
- Majority of Indy-area FRC teams fees are \$300 - \$600
- **Please** contact the Team Sponsors if you have **any** questions

2022-23 Team Budget Projections



- Goal to keep Student Fees less than 50% of budget
 - Drives requirement for Sponsorship visits – the whole team participates!

Income	Budget
Student Fees Projected	\$16,625
New Member Uniform Fee	\$1,300
Corporate Sponsorship Goal	\$18,000
Total	\$35,925

Expenses	Budget	Notes
Match Registration	\$11,000	\$6,000 for District, \$4,000 for State., \$1,000 for off-season
Transportation to competition	\$8,360	Includes school bus transportation & team lunches, plus robot transportation
Robot	\$7,000	Plan to build two robots to increase hands-on and design iterations
Inventory / Tools	\$2,500	Stock material replenishment and tool consumables
Business Ops	\$1,000	General office expenses and button-making materials
Uniforms	\$1,300	Uniform jerseys for new members
Website	\$250	Domain registration & basic e-commerce
FIRST Champ Alloc	\$4,500	FIRST Championships (Worlds) - expectation once per 4/years - allocate one-quarter core costs
Total	\$35,910	

Team Uniforms

- The team established a team uniform that can be used for all the years a student is on the team
- More durable shirt than standard T-shirt
- New students will receive two jerseys for the 2-day competitions
- Students will need to take care of the jerseys or purchase a new one



Sponsorship Network

- **Corporate sponsorships** are key to the team
 - Help fund activities
 - Provide opportunities for community engagement
 - Exposure to business operations for students
 - Future employment for students
- Personal connections are key to successful sponsor visits
- Sponsorships can be cash or in-kind materials & services
- Students are required to participate in sponsor visits to broaden team experience

Thank you to our sponsors!



Team Documents

- **Student Handbook**
 - Sets expectations and guidelines
 - Includes required forms
- **On-line Student Application**
 - Early Appl - Collected data entry (contact info, etc.)
 - Full Application due by mid-October
- **Business Plan**
 - Key document for team operation
 - Standard across all FRC teams



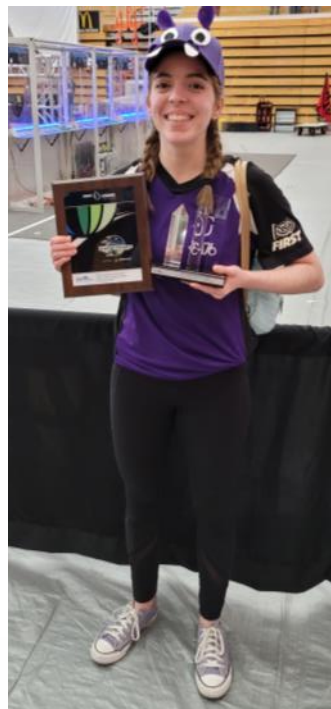
Varsity Team Letter

- For the past several years, students have been able to earn Varsity Team Letter
- Point-based system (100 pts needed)
 - Leadership (SAB, sub-team, drive team)
 - Attendance (Competition / Meetings)
 - Team Outreach Events (Cardinal Engr Night, Relay for Life)
 - Grades



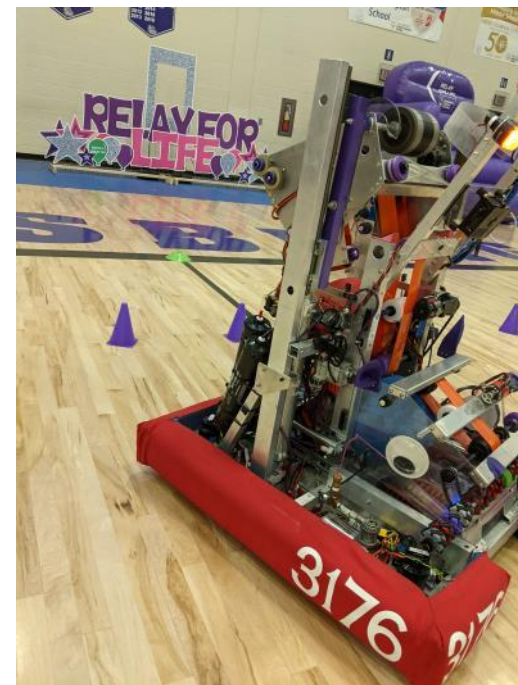
Team Awards

- Finished as State Championship Finalist 2022
- Won Indiana State Championship in 2017
- We compete for more than robot competition wins
 - Entrepreneurship Award
 - Controls Innovation Award
 - Quality Award



Community Outreach / Support

- Team 3176 also works to spread the excitement about Science, Technology, Engineering, and Math (STEM)
- Participate in events throughout the year
 - Cardinal Engineering Night / Science Night
 - Volunteer at Middle School robotics clubs (West FLL team)
 - Volunteer at *FIRST* events (District, State, Worlds)
 - Visits to Adv Manufacturing (Roark / Indiana WaterJet)
 - Team Philanthropy through Relay for Life
 - *FIRST* Day in May



Volunteer Opportunities

- Mentor and help with any of the sub-teams
 - Finance/marketing, computer programming, entrepreneur, multi-media, machinist, designer, engineer, etc.
 - Time commitment varies
- Sponsorship identification / fund drives
- *Any Interest?* – please ask a co-sponsor!





Contact Info

E-mail: team3176@brownsburg.k12.in.us

Team Website

<http://www.team3176.com/>

Remind Code

@frc3176

YouTube

<https://www.youtube.com/user/Team3176>

Twitter

@Team3176 @firstinrobotics

Team Co-Sponsors

Nathan Heidegger & Dawn Mayer

Questions & Answers

