FIRST TECH CHALLENGE



at Mill Creek Middle School

The hardest fun you will ever have!

What is the FIRST Tech Challenge (FTC)?

Read more on the official FIRST website: https://www.firstinspires.org/robotics/ftc

The **FIRST Tech Challenge** is a robotics competition where teams design and build an 18” robot to tackle a new challenge each year. Challenges may involve:

- Sorting balls
- Climbing obstacles
- Autonomous detection of field elements

Opportunities for Students

- Learn new skills that complement the MCMS curriculum
- Build and program a robot to compete against other teams
- Develop teamwork, leadership, and *gracious professionalism*

Competition Areas

Teams are judged on three main categories: 1) Robot Performance, 2) Design & Documentation, 3) Outreach

Gracious Professionalism

“Fierce competition and mutual gain are not separate notions. Gracious professionals learn and compete like crazy, but treat one another with respect and kindness in the process… Knowledge, Competition, and Empathy are comfortably blended.”

Commitment & Season Schedule

FTC is a competitive club, similar in time and dedication to a school-sponsored team sport. The season runs September through January.

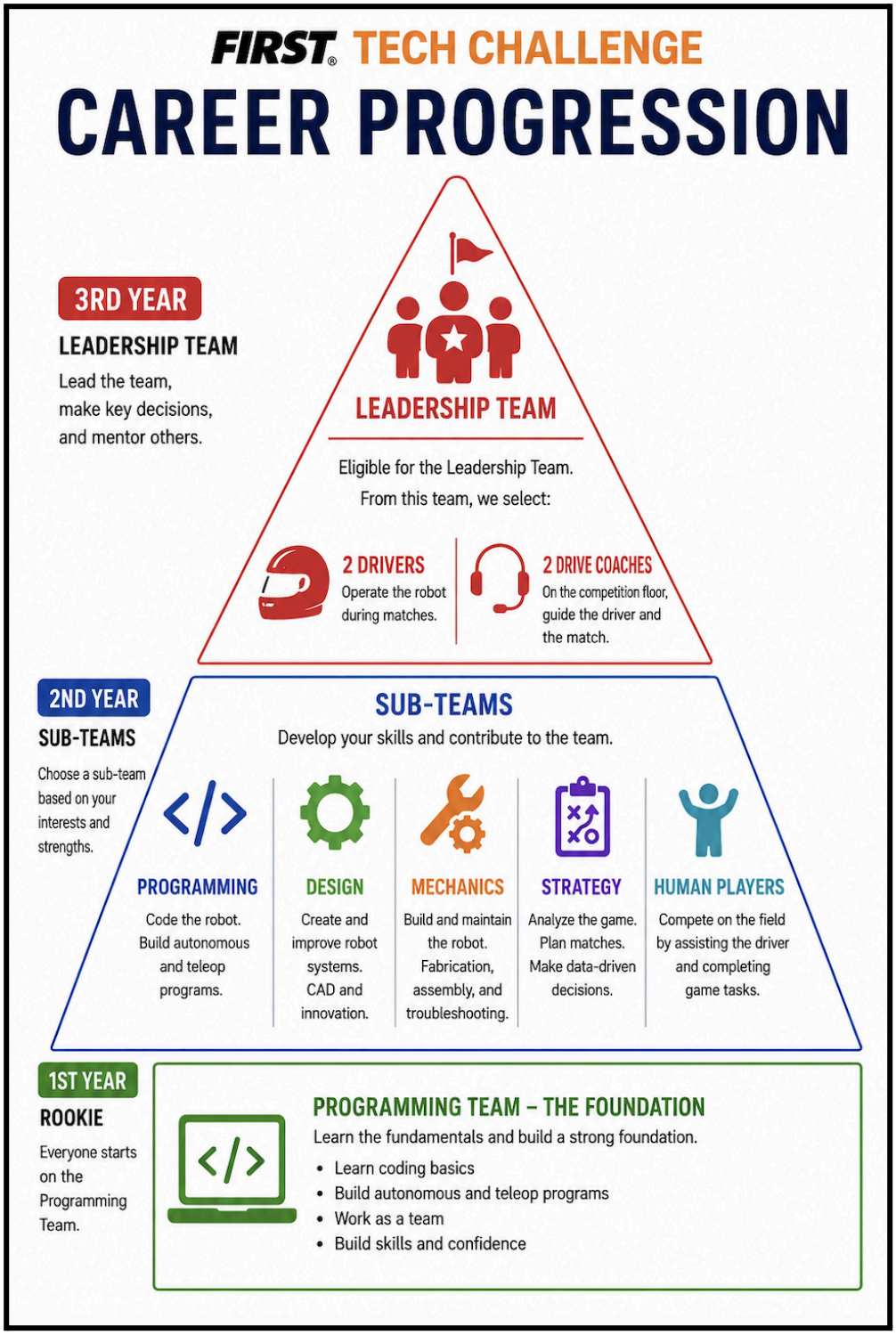
- **False Start:** September 9, 5-7 pm
- **Kickoff:** September 12, 10 am–2 pm
- **Regular Practices:** Mondays & Wednesdays, 5–7 pm, starting Sept. 14
    - Additional Drive Team practices TBD
- **Additional Practices:** 3–5 Saturdays leading up to competitions
- **Competitions:** November–January
    - 3–4 half-day Saturday competitions
    - 1 full-day League Championship in late January
    - Exact competition dates TBD
- **Team Expectations:** Members are expected to contribute to the overall success of the team.

Skills Students Will Learn

- CAD design, modeling, and 3D printing
- Java programming
- Electronics and wiring
- Motors, gears, and structural design
- Team collaboration modeled after real-world engineering groups
- Iterative problem solving: prototype → test → redesign → execute

Eligibility

- **Grades:** 7th–12th (targeted grades, but 6th graders are allowed too!)
    - *Yes, we compete against high school teams.*
- **Selection factors:**
    - Academic Performance
    - Recommendation Letters
    - Student Applications
    - School Attendance
    - Ability To Work Positively And Productively Within A Team



Additional notes:

- Off-season training is encouraged but optional
- Extra practices may be added before events
- Outreach events may require attendance outside normal practice
- No practice on USD 232 school closure days

Coaches & Mentors

The club is supported by **MCMS faculty and parent volunteers**.
We rely on parent involvement for expertise, mentoring, outreach, and event support.

Expectations

For Students:

- Follow MCMS rules (i.e. eligibility)
- Attend most practices (80% attendance requirement for competitions) and stay engaged
- Show respect for teammates, coaches, and staff
- Seek out opportunities to help your team and learn new skills.
- Maintain enthusiasm and have fun!

For Parents:

- Provide transportation to/from practices and events
- Assist in at least one area:
    - Technical expertise
    - Sponsorship connections
    - Mentoring & practice support
    - Outreach/event setup
    - Food/snack coordination
    - General practice support

Funding

- Supported by the **CTEC Robotics Program** and **Community Support**
- **Business sponsorships and donations are needed**
- **Team Dues: $50 per student (does NOT include team t-shirt or safety goggles)**

Developing Team Official Disclaimer:

This is our second year as an FTC Robotics team, and we're still building our program. FIRST considers teams in their first few years "New Veteran" teams because becoming an established team takes time.

I'm learning alongside the students, so there may be some bumps, surprises, and occasional last-minute communication as we encounter things for the first time.

Joining our team means helping build the program, not just joining one that's already established. If you're comfortable with a little adventure and want to help create something that gets better every year, this could be a great fit!

Coach Showalter