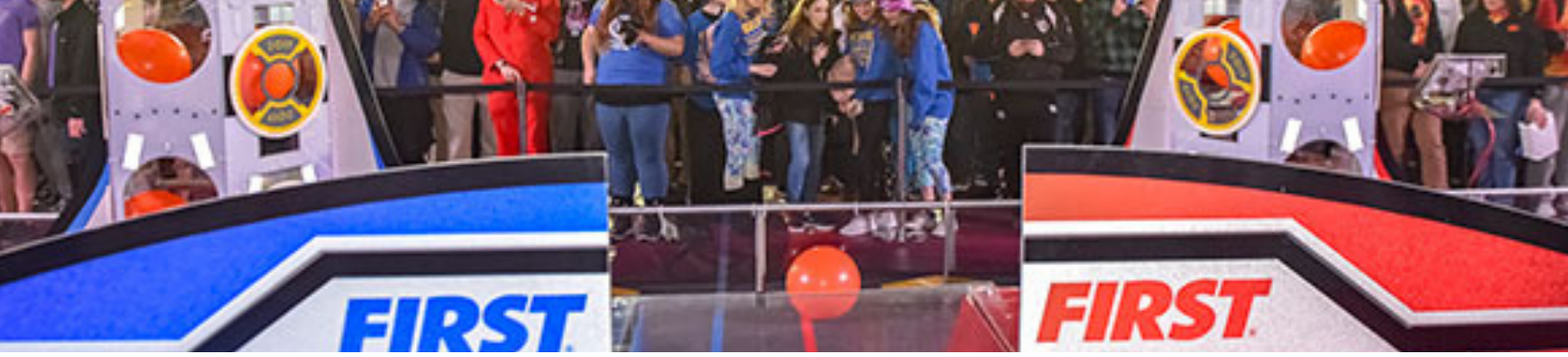

UNDERSTANDING FIRST ROBOTICS

WHAT IS FIRST?

FIRST, For Inspiration and Recognition of Science and Technology, is an organization that annually uses a sports-like competition atmosphere to entice students to study science, technology, and engineering. Students learn everything from mechanical engineering to leadership and teamwork to produce a robot that meets the objectives of the competition game.

WHO IS INVOLVED IN FIRST?

The heart and soul of FIRST are the students. They are the ones Dean Kamen, the founder of FIRST Robotics, hoped to capture when he started the competitions in 1992. However, the students would not have been able to build robots without the guidance from mentors, teachers, parents, and alumni who dedicate time and energy to make FIRST flourish and sustainable.

WHERE ARE THE COMPETITIONS?

FIRST has competitions all over the world for an energetic six weeks, all leading up to the master Championship Event in Detroit and Houston. For more information about the competition events, go to firstinspires.org.

HOW CAN I BE INVOLVED?

- Come to a competition as a spectator.
- Join a team as a student or mentor.
- Become a sponsor for your local FIRST Robotics team.
- Volunteer to be a judge, a referee, or one of the other millions of jobs at your nearest FIRST event.

LEVELS OF FIRST ROBOTICS

FIRST LEGO LEAGUE JR.

Captures young curiosity by exploring real-world scientific challenges, learning teamwork, and working with motorized LEGO® elements

Grades: K-4

FIRST LEGO LEAGUE

Elementary and middle school-aged students research a real-world engineering challenge, develop a solution, and compete with LEGO-based robots of their own design

Grades: 4-8

FIRST TECH CHALLENGE

Teams of middle and high school-aged students are challenged to design, build, and program a robot to play a floor game against other teams' creations

Grades: 7-12

FIRST ROBOTICS COMPETITON

High school-aged teams compete head to head on a special playing field with robots they have designed, built, and programmed

Grades: 9-12

DESTINATION: DEEP SPACE
FIRST ROBOTICS COMPETITION 2019 GAME

Main Objective: To fill both Rocket Ships and Cargo Ship with Hatch Panels and Cargo balls

Sandstorm Period: The first 15 seconds of the match will consist of robots being controlled manually or autonomously without vision.

Robot Contraints:
- Robot must weigh < 125 pounds
- Robot cannot extend more than 30 inches from frame
- Robot must stay within frame perimeter
- Frame perimeter must be < 120 inches
- Robot must be < 4 feet tall

SOUPER BOTS
FRC TEAM 203

Mission Statement: to extend FIRST opportunities and STEM education to every student in order to inspire the next generation of Scientists, Technologists, Engineers, Mathematicians, and Leaders.

Outreach Process: to connect people through presentations and robot demonstrations, create opportunities within our school district and underserving communities, and change perspectives by engaging Boy and Girl Scouts, elementary and middle school students, and other youth organizations.

28 Different Towns
Our team comes from 28 different towns within the Camden County area and all of our members attend the same technical high school, Camden County Technical School - Gloucester Township Campus.

21 Females : 39 Males
Currently, 35% of our team consists of female members, demonstrating a significant increase from last year's total of 24%.

77% Pre-Engineering
Out of the over 30 career programs our school offers, 77% of our members are enrolled in the Pre-Engineering academy. This is a significant increase over the 67% who were enrolled in the program last year.

100% of Alumni Attend a University or Enter the Workforce
Through the efforts of Team 203 and the FIRST Robotics program, our students are provided both technical and soft skills to pursue whatever field they choose.