FIRST® TECH CHALLENGE (FTC)
(Grades 6 to 8)

FIRST® Tech Challenge allows the students to design, build, program and compete with a robot that is made from a specified kit and on a smaller playing field. Robots are built using a TETRIX® platform that is reusable from year-to-year using a variety of languages. Teams, including Coaches, Mentors, and Volunteers, are required to develop strategy and build robots based on sound engineering principles.

FTC PRACTICE COMPETITION

TEAMS 5385 and 5391

Enigma's FTC teams were started in 2011 as part of a pilot program to introduce *FIRST*® to middle school students. The students participated in two regional meets, making it to the semifinal rounds at each meet.

BUILDING THE FTC ROBOT

For more information about Enigma Robotics *FIRST*® Robotics and & *FIRST*® Tech Challenge Programs, please contact:

MARY BETH ZAKFELD, Coach
West Catholic High School
1801 Bristol Ave. NW
Grand Rapids, MI 49504-2705
Email: enigmafirstrobotics@gmail.com

More information regarding *FIRST*®
www.enigmafirstrobotics.com
www.usfirst.org
www.firstinmichigan.org

ENIGMA ROBOTICS PROGRAMS

FIRST® ROBOTICS & *FIRST*® TECH CHALLENGE

OVERVIEW OF *FIRST*®

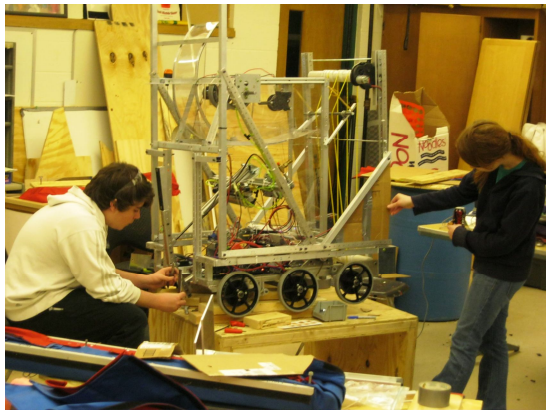
Founded in 1989 to inspire young peoples' interest in science and technology by Dean Kamen, inventor and entrepreneur.
The vision and goals of the program are reflected in the acronym *FIRST*® (For Inspiration and Recognition of Science and Technology).

"TO TRANSFORM OUR CULTURE BY CREATING A WORLD WHERE SCIENCE AND TECHNOLOGY ARE CELEBRATED AND WHERE YOUNG PEOPLE DREAM OF BECOMING SCIENCE AND TECHNOLOGY LEADERS"

DEAN KAMEN, FOUNDER

PROGRAM OBJECTIVES

- To increase the number of individuals who become engineers and scientists, needed for the US to be competitive in the world
- Encourage students to stay in math and science courses by showing them that math and science can be fun and provide good career opportunities



2012 FRC ROBOT

SKILLS STUDENTS GAIN:

- Designing, prototyping, building, and trouble shooting
- Programming, mechanical engineering and electrical engineering
- Problem-solving, organizational, and team-building skills
- Marketing, public relations, and fundraising
- Opportunities to positively impact local communities

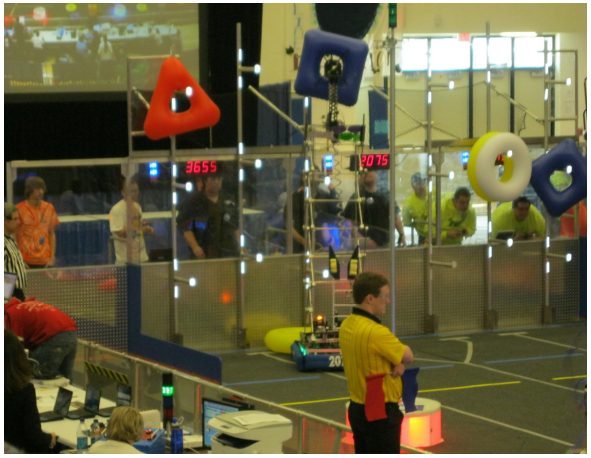
Nearly $15 million in scholarships are available exclusively to *FIRST*® students.

FIRST® ROBOTICS CHALLENGE (FRC) (Grades 9 to 12)

Dubbed a varsity Sport for the Mind,™ FRC combines the excitement of sport with the rigors of science and technology. High school teams are challenged to raise funds, design a team "brand," hone team-work skills, and in six weeks time build and program a robot to perform prescribed tasks against a field of competitors. It's as close to "real world" engineering as a student can get. Professional Mentors volunteer their time and talents to guide each team.

ENIGMA ROBOTICS TEAM 2075

Team 2075 Enigma was started in 2006 and has competed at the state finals numerous times and at the nationals in 2009. The team has received awards for safety, sportsmanship, and robot design.



2011 FRC ROBOT AT WEST MICHIGAN COMPETITION—GRAND VALLEY STATE UNIVERSITY