



The **FIRST**® Tech Challenge: **AT-A-GLANCE**

“Programs and initiatives aimed at capturing students’ creativity and hunger for knowledge will help our students prepare for college and life in the professional world. The FIRST Tech Challenge has quickly become an integral part of our efforts in encouraging students to take an interest in math and science.”

Hon. Donald L. Carcieri
Former Governor of
Rhode Island

“You have to use your brain to figure out what’s going to be a good defense. It’s very stressful and exciting at the same time.”

Nicholas Konetzke,
FTC Team Member
Technology and
Engineering Club at
St. Mary Central
High School

Team Demographics

- Young people in grades 9 to 12*
- Up to 10 students per team
- 2 to 3 Mentors per team

* May include 8th grade students 13 and older who are prepared to enter a high-school program

Events

- More than 100 qualifiers and Championship tournaments
- U.S., Canada, China, India, Mexico, the Netherlands, Romania, Singapore
- Up to 48 teams per event

The Game – 2011/2012

- Design and build a robot robust enough to push a bowling ball uphill, yet articulate enough to pick up racquetballs and place them into crates, then stack the crates
- Multiple solutions with one dominant strategy
- Game play includes autonomous and driver-operated modes
- Program multiple sensors for seeking out magnets and IR signals to aid in navigation during autonomous and driver-operated game play

The Robot

- Starting maximum dimensions: 18" W x 18" L x 18" H

The Robotics Kit

- Professional-quality software options
- 11 motors, 9 sensors, 2 game controllers, wireless communications and metal gears; and all the building materials you need



The Field

- Playing area: approximately 12' W x 12' L

FTC Awards

- **Inspire Award** – team that takes on challenges well beyond the program
- **Winning Alliance Award** – alliance represented in the final match of competition
- **Finalist Alliance Award** – 3 teams in the final match of competition
- **Rockwell Collins Innovate Award** – team with the most ingenuity and inventiveness
- **PTC Design Award** – team with the most compelling industrial design elements
- **Connect Award** – team most connected to the local and engineering community
- **Motivate Award** – outstanding team spirit and enthusiasm
- **Think Award** – team that best manages the engineering design process



FOR INSPIRATION AND RECOGNITION OF SCIENCE AND TECHNOLOGY

FIRST

Get Involved!

Join or start a team in your area



Sponsor a team, event, or local *FIRST* program



Become a team Mentor or Coach



Volunteer to fill over 100 roles

For information about *FIRST*® in your area:

WWW.USFIRST.ORG/CONTACTUS
603-666-3906



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