



## Rock City Robots Presents *FIRST*<sup>®</sup> Tech Challenge



*FIRST*<sup>®</sup> Tech Challenge (FTC), a robotics competition created by *FIRST* (For Inspiration and Recognition of Science and Technology), inspires future scientists and engineers.

FTC is designed to be an affordable, accessible opportunity for those who want to compete head to head, using a sports model. Teams are responsible for designing, building, and programming their robots to compete in an alliance format against other teams. The robot kit is reusable from year-to-year and is programmed using a variety of languages. Teams, including coaches, mentors and volunteers, are required to develop strategy and build robots based on sound engineering principles. Awards are given for the competition as for well as for community outreach, design, and other real-world accomplishments.

### **FIRST Tech Challenge Team Members Get To:**

- ✔ Design, prototype, build, and program robots
- ✔ Apply real-world math and science concepts
- ✔ Document the engineering process
- ✔ Develop problem-solving, organizational, and team-building skills
- ✔ Compete and cooperate in alliances at tournaments
- ✔ Earn a place in the World Championship
- ✔ Qualify for over \$10.4 million in college scholarships

### **How FTC Works:**

- Teams of around 10 children in middle and high school grades (Grades 7 – 12)
- 2 to 3 Adult coaches and mentors per team
- Develop relationships with corporate sponsors
- Teams use a modular robotics platform to conceive, build, and compete in a *FIRST*-designed game
- Up to 48 teams compete in sports-like tournaments with judges and awards
- **Online team registration begins in May of each year at [www.usfirst.org](http://www.usfirst.org).**

## What do I need to start a team?

1. At least 3 kids and one adult coach
2. A meeting place with space for the FTC challenge game perimeter (12' X 12')
3. A TETRIX® or MATRIX® robot kit (scholarships may be available for new FTC teams for the 2013-2014 season.)
4. Funds for:
  - FTC Team Registration (\$275)
  - FTC Field and Perimeter Supplies (\$400 -700)Total depends on if you make your own, or buy a ready-made kit from AndyMark.com.
  - Samantha® Wifi module - \$85 (used to connect the robot to the programming computer and the tournament field control system)
  - Engineering notebook supplies, tournament entry fees, t-shirts, etc. Some teams find sponsors, conduct fundraising activities, and/or ask for a participation fee from team members.

For information about Arkansas *FIRST* grants for Rookie FTC teams, contact:

Jackie Meisner  
Arkansas FTC

arkansasftc@gmail.com

Meredith Novak  
*FIRST*® Regional Director, Arkansas

mnovak@usfirst.org