

2.0 What is *FIRST* Tech Challenge?

FIRST Tech Challenge (FTC) had its beginnings in 2005 and grew out of a need for a mid-level robotics program to transition teams from *FIRST*® LEGO® League to the *FIRST*® Robotics Competition. Piloted for two years as the *FIRST* Vex Challenge, FTC became an official *FIRST* program and was renamed *FIRST* Tech Challenge in 2007.

FIRST Tech Challenge is a student-centered activity that is mentor supported and is about giving students a unique and stimulating experience. We want students to learn the value of teamwork and to respect everyone's ideas and contributions to the team. *FIRST* Tech Challenge allows high school students to work hand-in-hand with technical professionals to develop a solution to the annual challenge. The students do a majority of the work, but the mentor is there to offer guidance, suggestions, and coaching to keep the students on task and successful. *FIRST* values are about appreciating our differences and learning what those differences add to our lives. *FIRST* programs succeed most fully when team members bring the *FIRST* values they learn back to their communities.

The FTC Competition Kit challenges students' creative problem-solving skills by enabling them to build robots that do amazing things. When you bring dedicated, enthusiastic students and a mentor together, the results can be phenomenal! Students design and construct robotic devices which can be autonomously programmed or operator-controlled to perform various tasks.

FIRST Tech Challenge teams receive each year's game during a September Kickoff. The game's rules and regulations are provided on the www.usfirst.org website.

2.1 Gracious Professionalism™ – A *FIRST* Credo

Dr. Woodie Flowers, National Advisor for *FIRST*, speaks about Gracious Professionalism™ in this way: "The *FIRST* spirit encourages doing high-quality, well informed work in a manner that leaves everyone feeling valued. Gracious Professionalism seems to be a good descriptor for part of the ethos of *FIRST*. It is part of what makes *FIRST* different and wonderful."

Gracious Professionalism can and should mean different things to each of us. It is possible however, to outline some of its meanings:

- ❖ Gracious attitudes and behaviors are 'win-win.'
- ❖ Gracious folks respect others and let that respect show in their actions.
- ❖ Gracious professionals make a valued contribution in a manner pleasing to others and to themselves as they possess special knowledge and are trusted by society to use that knowledge responsibly.

As Woodie says, "In the long run, Gracious Professionalism is part of pursuing a meaningful life. One can add to society and enjoy the satisfaction of knowing that you have acted with integrity and sensitivity. That's good stuff!"

"In *FIRST*, Gracious Professionalism means that we learn and compete like crazy, but treat one another with respect and kindness in the process. We try to avoid leaving anyone feeling like they have lost. No chest-thumping barbarian tough talk, but no sticky sweet platitudes either. Knowledge, pride and empathy comfortably blended."

3.0 The Tournament

3.1 Overview

The *FIRST* Tech Challenge is played in a tournament format. Each tournament includes qualifying and elimination