



What is the First Tech Challenge (FTC)?



The First Tech Challenge is a student-centered program that focuses on giving students a unique and stimulating experience. Each year, teams engage in a new game where they design, build, test, and program autonomous and driver operated robots that must perform a series of tasks.

Core Values:

- Discovery: We explore new skills and ideas.
- Innovation: We use creativity and persistence to solve problems.
- Impact: We apply what we learn to improve our world.
- Inclusion: We respect each other and embrace our differences.
- Teamwork: We are stronger when we work together.
- Fun: We enjoy and celebrate what we do!

Two Alliances – one “Red” and one “Blue”, composed of two Teams each – compete in each Match. The object of the game is to attain a higher score than the opposing Alliance by locating and delivering Stones and Skystones from the Loading Zone to the Building Zone, building the highest Skyscraper, and placing the Capstone on the Skyscraper. The game is played in two distinct periods: Autonomous and Driver-Controlled.

The Match starts with a 30-second Autonomous Period in which Robots operate using only pre-programmed instructions and sensor inputs. During the Autonomous Period, Alliances earn points by: Repositioning their Foundation in their Building Site; Delivering Stones from the Loading Zone to the Building Zone; Placing Stones on their Foundation; and Navigating their Robots under their segment of the Skybridge.

The two-minute Driver-Controlled Period follows the Autonomous Period. During the Driver-Controlled Period, Alliances earn points by Delivering and Placing Stones from the Loading Zone to the Building Stone. Robots will also build Skyscrapers to go as high as possible without toppling over.

The final 30 seconds of the Driver Controlled Period is called the End Game. In addition to the previously listed Driver-Controlled Period Scoring activities, Alliances earn points by Capping their Skyscrapers with a Teamsupplied Capstone, moving their Foundations out of the Building Site, and Parking their Robot in their Building Site.



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