FTT is an award winning\(^1\) gender equity based after-school program that focuses on technological design and problem solving while supporting the application of mathematics and scientific principles. Design and problem solving activities in FTT are especially appropriate for girls and boys in grades 3 through 7 and their parents/guardians.

The NJ SSI Regional Center at the College of New Jersey offers FTT teachers the opportunity to involve family teams at their local school in a variety of exciting design challenges. Each of the seven FTT sessions allow families to investigate, explore, problem-solve and gain an understanding of how our human designed world works! FTT presents situations that spark curiosity and creativity, causing family teams to pose questions and then become engaged in discovering answers to those questions. By linking theory with practice, providing instruction on the design process and allowing for individual creativity, FTT helps girls and boys build confidence in their ability to plan and realize that they are capable of using technology to create solutions to real problems!

FTT provides design challenges in pre-engineering, architecture and physical science. Teams may design and construct: a communication device, create and test a structural tower, or design a control system for an amusement park ride using hand tools, simple machines or commercially available construction kits. Families have fun and gain an understanding of how things work, acquire confidence in safely using tools and equipment, learn to think critically and increase their confidence in solving technological problems. All Family Tools and Technology activities are aligned with the NJ Core Curriculum Standards in Mathematics and Science as well as national standards for Technological Literacy.

**Goals:**

1. **Facilitate family involvement** in real world projects involving technological design, problem solving and the application of mathematics and scientific principles.

2. **Increase the number of students, both girls and boys** who are interested in technological design, engineering and physical science.

3. **Stimulate parents to become advocates** for their children’s problem-solving endeavors in technological design, engineering and physical science.

4. **Introduce students to the many career opportunities** available in design, engineering and science.

The NJ SSI Regional Center at The College of New Jersey hosts 4-Day *Introductory FTT Professional Development Workshops* during the Fall for new teams of teachers (Two teachers per team are preferred but, not required).

**Registration forms are available online:** [www.tcnj.edu/~njssi](http://www.tcnj.edu/~njssi)

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