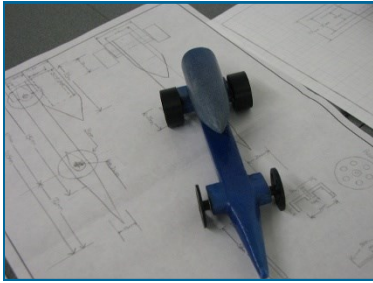


## Samples of Judged Events (Continued)



## Samples of Pre-Conference Events

**Automata Design & Technology** Participants develop a mechanical automaton toy based on a theme.

**Desktop Publishing** Participants develop a notebook that includes a tri-fold pamphlet, a three-column newsletter, and a poster for publication.

**Engineering Design** Participants work as a team to solve a design problem. The solution will include a prototype, a display, and a design notebook.

**Inventions and Innovations** Participants investigate and determine the need for an invention or innovation of a device, system or process. Teams create a prototype and document work completed to promote and demonstrate their idea for the invention or innovation.

**Music Production** Participants produce a musical piece that is designed to be played during the national TSA conference opening or closing general sessions.

**Promotional Graphics** Participants develop and present a graphic design that can be used to promote participation in TSA competitive events.

**Video Game Design** Participants develop an E-rated game that focuses on the subject of their choice.

## TIPS for Judges

*You will receive a copy of event guidelines, scoring sheets and other information upon your arrival at the conference. To request a copy of the guidelines prior to the conference, please contact the State Advisor.*

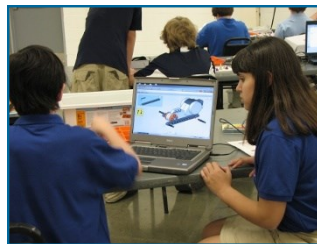
*In judging events please follow the guidelines and time limits. For clarifications, please speak with your Contest Coordinator.*

*Please be consistent in judging. Try to put the contestant at ease, but also maintain the same level of enthusiasm for all.*

*When rating a contestant leave yourself room to score subsequent contestants lower or higher.*

*In many events, contestants are tightly scheduled. Make every effort to follow the schedule as closely as possible, yet allow for some flexibility as needed.*

*Have fun! The students are excited to meet you!*



### IF YOU HAVE ANY QUESTIONS PLEASE CONTACT:

Mike Fitzgerald, State Advisor  
Technology Student Association  
Delaware Department of Education  
302.857.3334 (T)  
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## JUDGE'S HANDBOOK



# DELAWARE TECHNOLOGY STUDENT ASSOCIATION

*The Delaware Technology Student Association prepares members for personal and professional growth, leadership, and opportunities in technology, innovation, design and engineering.*

*Members apply their learning through co-curricular activities, competitive events, and community service.*



**www.detsa.org**

Your service as a judge for the upcoming conference will help strengthen partnerships between community, business, industry and the students who are preparing for the future!

This competitive events program provides our students with an exciting opportunity to explore their future and examine career opportunities. Your participation as a judge helps inspire these students to become the next generation of technologists, innovators, designers and engineers!



## About the Organization

We are a national organization composed of state associations and local chapters that serve students throughout the world who are interested in pursuing technological careers.

### The Organization Promotes:

- Personal & professional growth
- Leadership
- The study of technology, innovation, design and engineering
- The application of science, invention, technology, engineering and mathematics
- Community service

## Purpose of Events

The events program is an integral part of the classroom instruction. Students gain the opportunity to apply knowledge and skills, develop occupational competencies, engage in leadership, and receive state and national recognition!

## Samples of Competitive Events

**Architectural Renovation** Participants develop a set of architectural plans and related materials for an architectural design challenge and construct an architectural model to accurately depict the design.

**Dragsters** Participants design, produce working drawings, build and then race a CO<sub>2</sub>-powered dragster.

**Electrical Applications** Participants demonstrate knowledge of basic electrical and electronic theory and assemble a specific circuit from a schematic diagram.

**Flight** Participants build and analyze flight principles with a rubber band-powered model aircraft.

**Magnetic Levitation Vehicles** Participants design and construct a vehicle which will levitate and race over a magnetic track using an electric motor with a propeller for propulsion.

**Rocketry** Participants design, construct, launch and recover a model rocket.

**Structural Engineering** Participants work as part of a team, on site with supplied materials, to build a model of a structure that is destructively tested to determine design efficiency.

**System Control Technology** Participants work as part of a team on site to develop a computer-controlled model of a solution to a problem.

**Technology Bowl** Participants (one team of three members per chapter) complete a written, objective test in order to qualify for oral question/response, head-to-head team competition.

**Technology Problem Solving** Participants use problem solving skills and limited materials to develop a solution to a problem given on site.

**Transportation Modeling** Participants use specified materials and specifications to design and produce a model of a vehicle that fits the design problem.

**Transportation Systems** Participants document the engineering design process in the research, design, construction and evaluation of a rubber band-powered boat that is tested for performance.

**Chapter Team** Participants perform parliamentary procedures with an opening ceremony, dispose of 3 items of business, and perform a closing ceremony within a specified time period.

**Debating Technological Issues** Participants debate on site with either a pro or con side of a topic that is designated.

**Extemporaneous Presentation** Participants give a five minute speech after having drawn a card on which a technology topic for a speech is written.

**Prepared Presentation** Participants deliver a presentation, which should include audio/visual enhancement based on the theme.

**Prepared Speech** Participants develop and deliver an oral presentation that reflects the theme of the current year's national conference.

**Challenging Technology Issues** Participants prepare and deliver an extemporaneous debate style presentation with team members explaining opposing views of a current technology issue.

**Techno Talk** Participants demonstrate the ability to problem solve and work together in teams in order to build and replicate a structure using limited communication in two separate locations onsite.