



26-27 HS Rulebook

Unique to Texas Onsite Events

Unique to Texas Onsite Events (UTE-Onsite) are events that are unique to the state of Texas and can be competed at the regional and state level. Rules and details for these events may be downloaded from the individual event sections (see below).

These rules and requirements may be modified at the regional levels to accommodate for space and time constraints, check with your region for more details.

Attendance at the state conference is required of any students competing in this category.

Important: Ignorance of the rules and/or misunderstanding of the rules as run at the state conference is not an excuse for a protest or additional consideration.

CO2 Vehicles

CO2 Research Racer

The Research Racer Competition CO2 Cars are cars used as miniature racing cars which are propelled by a carbon dioxide cartridge, pierced to start the release of the gas, and which race on a typically 60 feet (18 metres) track. They are frequently used to demonstrate mechanical principles such as mass, force, acceleration, and aerodynamics. They are formed by shaping a single piece of wood or plastic into the body of the car.

High School

Event	Team Limit
UTE HS CO2 Research Racer - Wood	Individual
UTE HS CO2 Research Racer - ABS Plastic	Individual

Hot Rod CO2 Car

Hot Rod Competition (HRC) provides technology students with another opportunity to use their knowledge and skills in problem solving and the fun and excitement of racing competition. The goal of HRC is to encourage students to design and build realistic looking one-fourth mile hot rod car models. The project has been carefully planned to allow students to create realistic scale models of dragsters, funny cars, pro-stock cars and trucks and still have a chance to win races. The vehicle should be built of several parts or sub-assemblies rather than carved out or 3D printed as a single unit.

High School

Event	Team Limit
UTE HS Hot Rod CO2 Car Competition - Wood	Individual
UTE HS Hot Rod CO2 Car Competition - ABS Plastic	Individual

RC Vehicle

Competitors will build their own Electric RC car either from their own design or from a kit. No store bought, already assembled RC cars will be permitted. The course will be a road race. The purpose of the RC race is to showcase the learning activities of students building radio-controlled cars and the components that make up this type of transportation system. All RC Vehicles must be electric/battery powered.

High School

Event

UTE HS RC Vehicle

Team Limit

Team of 2 to 4 Students

Drone Competition

Texas TSA Power and Electric has developed NEW smart electrical meters for the city! These smart meters can be read wirelessly by a drone and then transmitted back to headquarters to determine usage amounts. We need your drone teams to collect this data from across our city and transmit it back to Texas TSA Power and Electric's headquarters as quickly as possible!

High School

Event

UTE HS Drone Competition

Team Limit

Team of 2 to 3 Students

Catapult

A catapult is a mechanism used to forcefully propelling stones, spears, or other projectiles. It is mainly used as a military weapon since ancient times. Catapults were used by ancient Greeks, ancient Chinese and Romans so to be able to shoot arrows and darts as well as stones at enemy soldiers.

High School

Event

UTE HS Catapult/Trebuchet

Team Limit

Team of 2 to 4 Students

Onsite Computer Skills Contest

Participating schools must supply all necessary software, hardware, paper, etc. All judging will be done on the contestants computer screen. Events such as animation and presentations will be demonstrated to a judge.

- All computers must be laptops with a battery capable of lasting the entire testing time.
- Students are allowed to bring a laptop and mouse. Additional monitors and keyboards are not allowed.
- This event has a 1 hour time limit.
- Hotspots are not provided or allowed.
- Texas TSA does not provide Internet access for competitors.
- Computer software should not be cloud or Internet based.

High School

Event

Team Limit

UTE HS Computer Skills - Animation	Individual
UTE HS Computer Skills - Graphic Design	Individual
UTE HS Computer Skills - Multi-Media Presentation	Individual

Graphic Solutions

This competition will test the student’s ability to solve a given problem with minimum supplies. The only items that may be taken into the contest area are: flat drawing surface, such as a clipboard, (maximum size of 12 x 16 inches), pencils and eraser. Drafting aids will not be allowed. Participants will be seated in regular folding chairs. Grid paper will be supplied.

High School

Event	Team Limit
UTE HS Graphic Solutions - Technology Problem Solving	Individual
UTE HS Graphic Solutions - Architecture and Construction	Individual
UTE HS Graphic Solutions - Engineering Design	Individual
UTE HS Graphic Solutions - Promotional Design and Marketing	Individual
UTE HS Graphic Solutions - Manufacturing Design	Individual
UTE HS Graphic Solutions - Information Technology	Individual
UTE HS Graphic Solutions - Bio-technology	Individual

Promotional Video

Applying leadership and 21st century skills, participants showcase video skills, tools, and processes to communicate, inform, and promote a topic, idea, subject, or concept through a film produced on-site at the Texas TSA Conference. Required criteria, such as props and a line of dialogue, make the competition more challenging and will be revealed at the event orientation meeting. Teams will be given 24 hours to complete the solution to the challenge.

High School

Event	Team Limit
UTE HS Promotional Video	Team of 2 to 4 Students

Social Media Marketing

Applying leadership and 21st century skills, participants showcase social media marketing skills, tools, and processes to communicate, inform, and promote an event on social media and produced on-site at the Texas TSA Conference. Required criteria, such as hashtags, content and a theme, make the competition more challenging and will be revealed at the event orientation meeting. Teams will be given 24 hours to complete the solution to the challenge.

High School

Event	Team Limit
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