



Texas TSA Rulebook

2026-2027

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Texas TSA Rulebook Introduction

The Texas Technology Student Association (TSA) State Competition is managed and conducted by the Texas TSA Board of Directors, Texas TSA Executive Director and Texas TSA State Contest Director, under the oversight of the Texas Education Agency (TEA) and its policies regarding CTSOs. The state competition includes: a business meeting, state officer elections, project competition and student competitive events.

All interested Career and Technical Education students in Texas are invited to attend this annual meeting. The specific time and place of events and contest details will be distributed by the Contest Director.

The cost of transporting and ensuring the projects to and from the competition is the responsibility of the school, advisors, and students. Texas TSA will not be responsible for damage, loss, or theft before, during, or after the competition. Texas TSA will not be responsible for mailing or shipping of any projects or awards. Chapters will be solely responsible for picking up projects and awards at the end of the State Contest. Anything left after the contest will be thrown away by the Fort Worth Convention Center within 1 hour after the closing of the last general session.

The competition is restricted to the activities and classifications described in this publication. The competition does not attempt to provide a classification for additional activities that might be conducted in the Career and Technology Education programs or other school programs. Only those students and advisors who are registered members of the Texas Technology Student Association (TSA) are on the regular mailing list. If you would like to receive information regarding state competition, or affiliation please contact the Texas TSA Executive Director. Visit the Affiliation page on our main website to learn more about how to join TSA.

State Contest Fees

After qualifying through a Texas TSA regional contest, students are eligible to participate and compete in the Texas TSA State Contest, held in Fort Worth. Dates for the event will be posted on the Texas TSA homepage or events page.

Texas TSA does not refund any money for unused state entries. Texas TSA does not require a student to be present at State Contest to enter their project(s), unless they are competing in an event that requires the student to be physically present for the event. Those events include all National Qualifying Events and Unique to Texas Onsite Events.

Contest Management Team

Texas TSA's contest management team proudly oversee the management of the Texas TSA contest and are responsible for the following:

- Developing and operating within a yearly budget
- Coordinating with convention center, hotels, vendors, etc
- Developing procedures for safe and efficient operation of event
- Creating and maintaining the event schedule for contest
- Determining staffing and judging needs
- Meeting with each other as needed to organize for the upcoming school year

Annually, Texas TSA recruits people to run all the Unique to Texas events and National Qualifying events, Coordinating Judge Chairman, National Qualifying Event Coordinator, School Awards Coordinator, all Room/Hall Coordinators, Special Services and Contest Consultants. Advisors who have a concern regarding an event or competition rules should first contact the State Contest Director.

State Contest Director

Jeff Taylor

contest.director@texastsa.org

Executive Director and State Advisor

Pamela Cook

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National Qualifying Event (National Events) Managers

Tara Dye and Kristin Rausch

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Data Managers

Emily Gresham and Carissa Clohessy

Judges Coordinator

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Officer Coordinator(s)

Rachelle Ferguson and Cody Logsdon

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Event Coordinators

Unique to Texas Events (Onsite, Projects, and Special Events)

Each Event Coordinator, after consultation with the State Contest Director, is responsible for the operation of the area assigned and has complete control and authority concerning that event. Questions of eligibility are the responsibility of the State Advisor. Refer to the Filing Protests section of the rulebook for directions on lodging concerns or protests. Rules Interpretation Panel (RIP) requests should be filed while the event is underway to ensure the best outcome.

National Qualifying Events

The Event Coordinator works under the guidance of the National Event Managers appointed by Texas TSA. If modifications are needed to the structure or rules of the event those have been approved by the National Event Managers. Refer to the Filing Protests section of the rulebook for directions on lodging concerns or protests. Rules Interpretation Panel (RIP) requests should be filed while the event is underway to ensure the best outcome.

Awards

Texas TSA is honored to provide student members with awards at the State Contest for distinguished work.

Unique to Texas Project & Onsite Awards

Only the top 5 ranked entries in each classification will be recognized. This includes all:

- Unique to Texas Events - OnSite (MU & HU)
- Unique to Texas Events - Projects (MP & HP)

Placement	Award	Overall Award Point Tabulation
1st	1st Place Medallion	5 points
2nd	2nd Place Medallion	4 points
3rd	3rd Place Medallion	3 points
4th	Texas TSA Finalist Pin	2 points
5th	Texas TSA Finalist Pin	1 point

Best in State Patch: A student who receives the 1st Place award for their entry is eligible to purchase a BIS patch.

Purchasing Awards

One award per event placing is provided by Texas TSA. Awards are distributed after the Awards Ceremony which is during the Third General Session. Chapters that do not pick up their earned awards will forfeit their awards. Earned awards will not be mailed to Chapters. Additional awards may be purchased by the advisor, with two options available as described below.

Option A - Onsite

Chapters can purchase additional awards on-site. Accepted forms of payment are PayPal, cash, or check.

Option B - By Mail

Chapters can purchase awards up to 10 calendar days after the end of the State Contest by completing a form that will be available at the awards desk after the Third General Session. Chapters wishing to purchase additional awards after the State Contest will be required to pay the postage cost to mail the awards via USPS Priority Mail. Advisors may pay with a PO, PayPal, cash or check. First Place for all National Events Events and UTE OnSite Events will receive an event banner, (1) first place medal, and (1) BIS Patch. Additional banners are not available for purchase.

Unique to Texas Chapter Awards

High Point Chapter Awards are broken down into 3 divisions for Middle Schools and 4 divisions for High Schools. These divisions are based upon the number of entries from the Texas TSA Rulebook in the UTE categories that each school enters at the StateContest. First, Second, & Third place trophies are awarded to the highest placing Chapters based upon the total of points earned for all of a Chapter's 1st Place, 2nd Place, 3rd Place, 4th Place, & 5th Place entries. National Event entries are not included in the entry count or points for the UTE Chapter Awards. A project must earn a minimum of 70% of the possible points on their rubric to earn points towards the Chapter Awards. They will receive their individual awards regardless of score. Also, projects that are entered into the Exploratory Events will not count towards the number of entries or total points earned.

First, second and third place awards will be given in the following Divisions:

High Point Chapter - Middle School	High Point Chapter - High School
Division I 1-10 Division II 11-40 Division III 41 or more	Division I 1-30 Division II 31-60 Division III 61-100 Division IV 101 or more

National Event Chapter Awards

Additionally, the Top 3 Chapters that place based on only the Chapter's National Events will be recognized using the same point values.

Middle School	High School
1st Place 2nd Place 3rd Place	1st Place 2nd Place 3rd Place

NOTE: Chapters must be present at the Awards Ceremony during the Third General Session in order to receive all Chapter Awards. Awards will not be mailed to Chapters that are not present for the Awards Ceremony.

General Rules and Regulations

Required Attendance

- TSA members, advisors, and chapters must be currently affiliated with Texas TSA to attend the conference.
- Schools wishing to attend the conference must complete conference registration by the posted deadlines.
- All adult advisors, chaperones, and student participants must attend the entire conference.

Required Identification

- All registrants must wear their conference identification badge and lanyard at all times.
- The conference badge and lanyard provided by Texas TSA at chapter check-in must be worn around the neck and clearly visible.
- A replacement fee will be charged for lost, damaged, or destroyed conference badges or lanyards.

Student Responsibilities

- Each participant is responsible for obtaining and understanding the rules and guidelines for their competitive events.
- Lack of knowledge or understanding of an event's rules does not constitute grounds for an accommodation, exception, or rule change.
- Students participating in a TSA Competitive Event are responsible for knowing all applicable updates, changes, and clarifications.

- Participants must comply with both the specific rules for their competitive event and the General Rules and Regulations for National Events.

Chapter Judging Obligation Policy

- Refer to the Chapter Judging Obligation section of the rulebook for the full policy requirements
- The policy ensures that all participating chapters contribute to the judging process at the Texas TSA State Conference. This shared responsibility supports fair, high-quality competitive events aligned with classroom instruction and industry standards.
- Every chapter attending the Texas TSA State Conference must fulfill a judging obligation. The requirement is determined by the total number of student entries submitted by the chapter

<i>Number of Entries</i>	<i>Required Judging Hours</i>
<i>5 or fewer</i>	<i>4 hours</i>
<i>6–100</i>	<i>8 hours</i>
<i>101 or more</i>	<i>16 hours</i>

- Judging hours may be completed by multiple individuals and through various approved judging activities.

Attendee Code of Conduct and Consequences

- All Attendees are expected to conduct themselves in a respectful, responsible, and professional manner and to comply with the Texas TSA Code of Conduct, conference rules, event rules, and applicable school or district policies.

- Conduct that violates the Code of Conduct or otherwise disrupts the safety, integrity, or orderly operation of the conference may result in disciplinary action.
- Depending on the nature and severity of the violation, consequences may include, but are not limited to:
 - Verbal or written warning;
 - Removal from a competition, activity, or conference event;
 - Disqualification from one or more competitive events;
 - Loss of awards, recognition, or eligibility;
 - Removal from the conference;
 - Suspension or restriction from participation in future Texas TSA activities; and
 - **Forfeiture of advancement opportunities**, including eligibility to advance to subsequent levels of competition.
- Attendees who are disqualified or removed from competition or conference participation may forfeit any related advancement opportunity, regardless of the Attendee's competitive standing or placement.
- Texas TSA reserves the right to determine appropriate consequences based on the circumstances and severity of the violation. Consequences may apply to an individual Attendee, team, or chapter when appropriate.
- Serious violations may be referred to the Attendee's school or district for further disciplinary action in accordance with applicable policies.

Dress Code

- All attendees must comply with the conference and event-specific dress codes.
- Advisors are responsible for ensuring that their chapter members comply with the dress code.
- Advisors must maintain a professional appearance throughout the conference.

Competitive Entries

- Entries must be started and completed during the current school year.
- Entries may be submitted for one (1) year, and one (1) event only.
Participants may not use the same project/product in multiple events.
An infraction of this rule results in disqualification.
- Each participant/team shall submit only one (1) entry per event.
- All entries must be in English.
- Participants must comply with any additional requirements established by Texas TSA for modified events. Advance notice of such requirements will be posted in the Event Guidelines.
- Unless otherwise specified in the event rules, entries may not include identifying information other than the national student ID or team ID number.
- Texas TSA and National TSA provide guidelines for individual and team entry content but are not responsible for content choices made by participants.

Prohibited Materials, References, and Images

- Hazardous materials, chemicals, open flames, combustibles, wet-cell batteries, and similar substances are prohibited at the Texas TSA Conference.
- Competition entries and presentations may not include racial or ethnic slurs or symbols, references to gang affiliation, or vulgar, violent, subversive, or sexually suggestive language or images.
- Entries and presentations may not promote products that students are prohibited by law from purchasing, including tobacco, alcohol, or illegal drugs.
- The depiction, reproduction, or display of guns, knives, or other weapons is prohibited.
- Contest Officials have final discretion in determining whether competition content complies with these requirements.
- Failure to comply with these rules may result in disqualification and other consequences under the applicable TSA Code of Conduct.

STATE CONFERENCE COMPETITION ATTIRE



COMPETITION ATTIRE - National Events

Shirt: official royal blue-button down TSA shirt. *For the Texas TSA State Conference ONLY, students may wear the Texas TSA logo-button down shirt, short or long sleeve. This shirt is NOT acceptable for competition at the National TSA Conference.*

Pants, or knee-length Skirt: gray

- **Unacceptable:** jeans; jeggings; leggings; baggy pants; exterior pocket pants; shorts
- **Unacceptable:** any skirt length shorter than one inch above knee.

Shoes: black dress shoes worn with black or dark blue socks, hosiery (optional):

- open-toed shoes or sandals are acceptable
- **Unacceptable:** athletic shoes; flip-flops; military boots; or work boots

Required additional attire for Middle and High School Chapter Team event

Blazer: navy blue with official TSA patch

Tie: official TSA tie (males)

- Females are not penalized for wearing the official TSA tie to Chapter Team or any other competitive event.

***Above attire may be worn for other competitions if preferred by event participants.**





STATE CONFERENCE COMPETITION ATTIRE



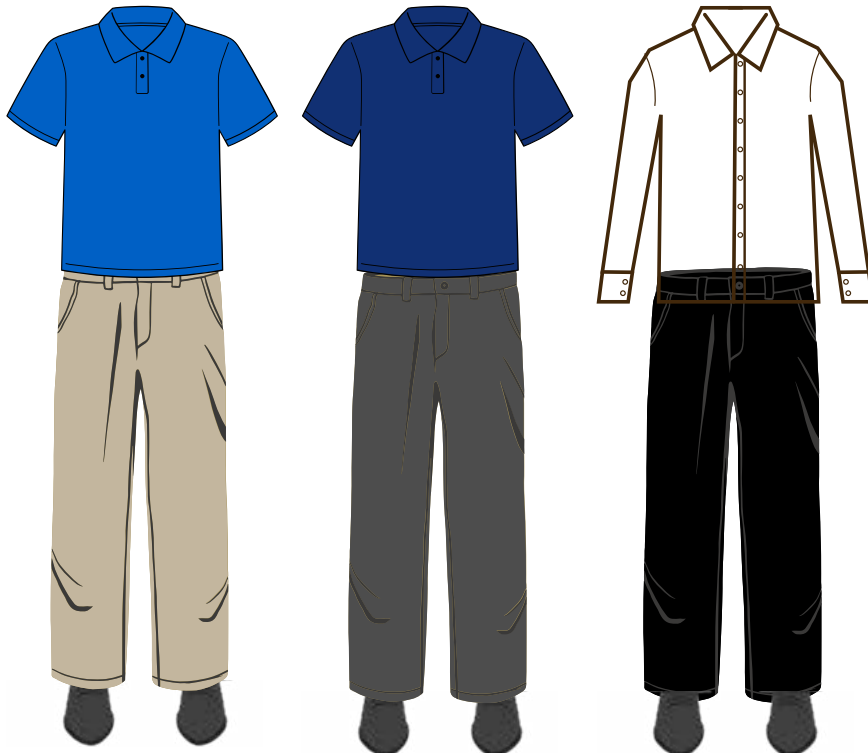
COMPETITION ATTIRE - UTE (On-Sites, Project Area & Robotics)

Shirt: official royal blue-button down TSA shirt, official royal blue polo or solid polo with NO logo in white, red, navy or royal.

- **Unacceptable:** school logos or any other logo except the National TSA logo or the Texas TSA logo.

Pants, or knee-length Skirt: gray, black, navy or khaki

- **Unacceptable:** jeans; jeggings; leggings; baggy pants; exterior pocket pants; shorts
- **Unacceptable:** any skirt length shorter than one inch above knee.



Shoes: black dress shoes worn with black or dark blue socks, hosiery (optional):

- open-toed shoes or sandals are acceptable
- **Unacceptable:** athletic shoes; flip-flops; military boots; or work boots

Fort Worth Convention Center Safety Regulations

The safety of our members and our advisors is very important. The following safety regulations are strictly enforced at the Fort Worth Convention Center for the safety of all Texas TSA event participants and should be followed at all times.

1. The Fort Worth Convention Center is a nonsmoking facility. This includes prohibition of any tobacco product and/or vaping, vaping equipment or paraphernalia.
2. All fire exits, fire extinguishers, and exit or emergency signs must remain unobstructed or unblocked at all times.
3. No extension cords may extend across aisles or along a pathway without proper protective equipment provided by the Fort Worth Convention Center. There is a charge for such protective equipment that must be paid in advance.
4. The following items are not permitted inside of the Fort Worth Convention Center:
5. LPG cylinders of any size (propane, butane, or Compressed Natural Gas (CNG))
6. Flammable liquids/fuels (gasoline, diesel, lighter fluid, ether, etc.).
7. Camping stoves or fuel
8. BBQ grills (being used for cooking on-site)
9. Helium filled balloons
10. Any source of open flame or spark (candles, welding torch, arc welding, grinding, abrasive cutting, etc.
11. No hazardous chemicals (non-flammable)
12. Vehicles - the following are requirements for displaying vehicles and fuel-powered (non-electric) engines:

13. No more than one-fourth (1/4) tank of fuel (5 gallons maximum)
14. Fuel tank cap must either be locked or sealed with liquid proof tape.
15. Battery cables must be disconnected from the engine. Battery removed unless used to power some aspect of the display.
16. Floor pan to catch any drips of fuel or oil.
17. Keys to all vehicles must remain on-site so that the vehicle can be moved in the case of emergency.
18. No Glitter, Confetti, or Birdseed - an additional charge for carpet cleaning will be charged.
19. The use of High-Residue Tape (e.g. Duct/Duck Tape) is prohibited in the Fort Worth Convention Center. Low-Residue Tape (e.g. Painters Tape, Gaffers Tape) is allowed.
20. Holes may not be drilled into any surface at the Fort Worth Convention Center.
21. Staples, tacks, and/or nails may not be used to attach or hang anything to any surface of the Fort Worth Convention Center.
22. All painting is prohibited on the Fort Worth Convention Center premises. This includes sidewalks and loading areas as well as anywhere inside of the Fort Worth Convention Center.
23. Signs, banners, decals, and stickers are prohibited unless approved in advance by Fort Worth Convention Center.
24. There is no guarantee of access to electricity, electrical outlets/service or Internet (Ethernet/WiFi).
25. Abandoned Property - Anything left at the Fort Worth Convention Center after the Contest Check-Out will be thrown away. This will commence 1 hour after the end of the last General Session.
26. No cutting and/or grinding on any project, Unique to Texas, National Qualifying Events, or VEX Robot may be done inside the Fort Worth Convention Center.
27. No "camping out" in the hallways. Chapters and students may not block hallways or any access/aisle in any area. If waiting in an area, please stay within 5 feet of a wall provided it does not block any pathways.
28. Please be advised that there is no guarantee of access to electricity or internet access within the Fort Worth Convention Center.
29. Operating drones, RC cars or Trebuchets/Catapults in any area other than the designated competition area without permission from the event coordinators will result in disqualification.

Important: Do not unplug anything that does not belong to you to gain access to an electrical outlet!

Texas TSA State Conference Chapter Judging Obligation Policy

Purpose and Philosophy

Career and Technical Student Organizations (CTSOs) play a vital role in preparing students for college and career readiness. Advisors, administrators, and adult supporters are not only chaperones or volunteers at the Texas TSA State Conference, they are key partners in ensuring a fair, professional, and meaningful competitive experience for students.

Judging by knowledgeable adults helps ensure competitions reflect classroom instruction, industry standards, and real-world expectations. This policy establishes a chapter-based judging obligation that distributes responsibility equitably across participating schools while maintaining the integrity and quality of conference events.

Chapter Judging Obligations

Beginning with the 2026 Texas TSA State Conference, judging requirements will be assigned at the **chapter level** rather than to individual advisors.

Judging obligations are based on a chapter's total number of student entries at the State Conference:

- **Chapters with 5 or less entries**
 - Required to provide a minimum of **4 hours of judging**
- **Chapters with 6 - 100 entries**
 - Required to provide a minimum of **8 hours of judging**
- **Chapters with 101 or more entries**
 - Required to provide a minimum of **16 hours of judging**

Judging hours:

- May be fulfilled by **multiple individuals**
- May be completed through a combination of:
 - **Virtual judging (pre-conference)**
 - **On-site judging during the State Conference**
 - **On-site VEX volunteer**
 - **Test Proctor**



The total number of required judging hours for the conference is calculated annually based on the previous year's total entry count. These hours are then distributed among all participating chapters to determine each chapter's obligation.

Who Is Eligible to Judge

The following individuals are eligible to serve as judges:

- CTE Administrators
- Parents or Guardians
- Faculty Members
- Alumni
- CTSO Advisors

All judges must be adults and must meet any training or orientation requirements established by Texas TSA.

Judge Registration and Fee Waivers

Chapters may register eligible adults as judges during the conference registration process, including:

- Secondary advisors
- Chaperones
- Administrators

Adults registered as judges:

- Will **not be charged a conference registration fee**
- Are expected to complete a minimum of **8 hours of judging per registered judge**
- While registered judges are expected to complete a minimum of 8 hours of judging, chapters are only responsible for fulfilling their total assigned judging obligation.

If a registered judge does not complete their required judging time:

- The chapter will be billed \$150 for each registered judge who does not fulfill their 8 hour judging requirement.
- This billing will occur after the conference based on verified judging hours.



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Opt Out Option

If a chapter is unable to meet its required judging obligation, the chapter may opt out by paying a **\$150/8 hour judging requirement - judging opt-out fee**.

- This fee will be used by Texas TSA to hire qualified judges.
- The opt-out fee must be submitted according to conference deadlines.
- Opting out fully satisfies the chapter's judging obligation for that conference year.

Event Coordination and Judging

Event coordination and judging are separate responsibilities.

- **Event coordination time does not count toward a chapter's judging obligation**
- Event Coordinators receive compensation for their coordination duties
- Advisors who serve as Event Coordinators are strongly encouraged to recruit judges from their school or chapter to help meet their required judging hours
- Please ensure judges recruited by coordinators are signing up in accordance with Texas TSA judging policies. Please do not just bring your judge

This distinction ensures adequate staffing for both coordination and evaluation roles while maintaining fairness across all participating chapters.

Accountability and Enforcement

Chapters are responsible for:

- Tracking their assigned judges
- Ensuring all required judging hours are completed
- Communicating clearly with registered judges regarding expectations

Failure to meet judging obligations or resolve billing for incomplete hours may impact future conference participation or result in additional fees, as determined by Texas TSA.



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Judging Credit and Event Completion

To ensure fairness and consistency, judging assignments must be completed in full to receive credit.

Judging credit is awarded **only upon the full completion of an assigned event or judging assignment.**

- Judges must complete the **entire judging assignment** for an event to receive credit for any judging hours.
- Partial completion of an event will **not** result in partial judging credit.
- If an event requires more time than a judge's minimum required hours, the judge is still expected to **remain for and complete the entire event.**
- To ensure fairness and consistency, judging assignments must be completed in full to receive credit.

Copyright, Original Work, and Generative AI Policy

All Texas TSA State Contest entries must represent the original work of the participating competitor(s) or team. Competitors are responsible for ensuring that all work submitted or presented complies with copyright law, citation requirements, the TSA Honor Statement, and the requirements of the applicable Competitive Event.

1. Original Work and Plagiarism

- All work must be created and completed by the individual competitor(s) or team.
- Plagiarism, copyright infringement, cheating, falsification of information, and attempts to gain an unfair competitive advantage are prohibited.
- Ideas, texts, images, graphics, music, video, data, code, or other material obtained from another source must be appropriately cited.
- Materials labeled "free," "for reuse," or similar must still be cited and may require permission for use.
- Plagiarized content may result in **immediate disqualification**.

2. Citations and Copyrighted Material

- Citations and references must follow a recognized professional citation style selected by the competitor. Examples include **MLA, APA, Chicago, and IEEE**.
- Failure to use the required or an appropriate professional citation style may result in a **20% rules violation**, consistent with applicable TSA rules.
- When copyrighted material is used, competitors must obtain and retain written permission when required. Competitors are responsible for determining whether permission is required and should familiarize themselves with applicable copyright and fair-use requirements.
- Use of the TSA name, logos, and other protected branding must comply with the applicable **TSA Branding Guide**.

3. Generative Artificial Intelligence (GenAI)

Texas TSA recognizes that Generative Artificial Intelligence can be an educational tool when used ethically and appropriately. **GenAI may only be used when permitted by the specific Competitive Event.**

When permitted, GenAI may be used as a support tool to:

- Explore possible topics or approaches;
- Begin or assist with locating potential sources;
- Clarify understanding of complex information;
- Brainstorm or organize ideas; and

- Review student-created work for grammar, clarity, or tone.

GenAI **must not replace the student's own learning, analysis, decision-making, creativity, or synthesis of information**. Students must independently evaluate sources, conduct appropriate research, analyze and synthesize evidence, and make the final decisions regarding the content and presentation of their work.

Students are responsible for verifying the accuracy of information generated by AI and for ensuring that AI-generated material does not introduce plagiarism, copyright violations, fabricated information, or other rule violations.

4. GenAI Attribution and Documentation

When GenAI is permitted by an event:

- Its use must be clearly and accurately disclosed as required by the Competitive Event.
- Students must complete the **Resources and AI Reflection Form** when required. The form documents the AI tools used and their role in the research and solution process and must be submitted according to the applicable event instructions.
- AI-generated content must not be presented as entirely student-created when the event requires disclosure of AI assistance.
- Competitors remain responsible for all content included in their entry, regardless of whether that content was created by the student or generated with AI assistance.

5. Events Where GenAI Is Not Permitted

There are events where the rules specifically state that GenAI may **not** be used. For these events, competitors must complete the work without the use of Generative AI tools.

6. Enforcement and Penalties

Competitors at all levels of Texas TSA competition are expected to comply with the **TSA Honor Statement**. A determination that a competitor has violated the Honor Statement, copyright requirements, or applicable AI requirements may result in a **20% rules violation**, disqualification, or other penalty as specified by the applicable Competitive Events Guide.

Plagiarism, significant copyright violations, unauthorized use of AI, or other serious violations may result in **disqualification of the affected entry and/or all State Contest entries associated with the student(s)**.

Serious or widespread violations from a chapter may result in **additional consequences for the chapter**, including forfeit of all awards and potential probation from the Texas TSA State Competition.

7. Competitor Responsibility

Students and advisors are responsible for understanding and following the rules applicable to each Competitive Event. When there is uncertainty regarding copyright, appropriate attribution, AI use, or whether material may be included in an entry, competitors should resolve the issue **before submitting their entry**.

Participation in Texas TSA competition constitutes agreement to follow these requirements and the TSA Honor Statement.

Filings Protests

Follow the procedure below for filing a Rules Interpretation Panel (RIP) request. RIPS should be filed while the event is underway to ensure the best outcome.

- The chapter advisor of record may pick up the RIP form from the Information/Registration Desk.
- The chapter advisor of record must fill out the form. Students are not allowed to do so.
- RIPS must be based on specific rules and procedures. They cannot be submitted to protest a judge's decision alone. For example, a RIP can be filed for a team getting 45 seconds instead of the required 60 seconds. Or a project was deducted for missing a component but it was in fact present at the time of judging.
- Once filled out, the chapter advisor of record returns the form to the information desk so it can be given to the appropriate event manager.
- The manager reviews the protest to determine that it has met all the requirements for a RIP. They will determine if action needs to be taken.
- Once the manager has determined that a RIP is indeed warranted, the RIP committee will review the RIP and take action as necessary. An example of a RIP that action will be taken on:
 - The coordinator allowed students to throw their gliders rather than use the launcher.
 - An example of a RIP that action will not be taken on: My students placed first at regionals and didn't make semi finals at State. They said they heard they were penalized and we need to know why.
- Additionally, if the RIP concerns a modification made with the official permission of the managers and impacts all contestants equally, then the RIP will not result in any changes.

Minimum Required Documentation

Required Minimum Documentation:

1. Documentation must be the original work of the student/s and unique for each entry. Advisors are not allowed to create a generic response that their students use on the templates.
2. Documentation must be computer generated on the required forms. Hand drawn sketches should be scanned in and inserted as an image to the document.
3. Documentation is required for all UTE Project entries and will be used during the judging process to better understand the student's work.
4. For virtual submissions, the documentation should be uploaded in the same pdf as the project at the front. If the project submission is a URL, the documentation will be uploaded as a pdf.
5. For projects that require the onsite submission, **the documentation must be secured in a clear front report cover** unless otherwise indicated in an event's regulations. ([Sample report cover](#))
6. Failure to follow these guidelines may result in points deduction or the project not being scored.

Directions for Completing Minimum Documentation:

1. Portfolio order
 - a. Completed Texas TSA Project Documentation Form (exactly 6 pages)
 - b. UTE AI reflection form if applicable
 - c. Photo Release form if applicable
 - d. Additional Documentation as required by specific events
2. All documentation should be computer generated. If a portfolio is printed out, they are secured in a clear front report cover with single sided 8 ½ x 11 inch pages in the order listed above.
3. The first page of the Texas TSA Project documentation MUST be visible through the clear cover of the report cover.

4. The image box on the first page must be the image of the project (even if the project is a sketch or drawing), this helps with ensuring that the documentation is matched with the correct project. If the project is a video or audio submission that is submitted virtually, this box may be left blank.
5. In the Texas TSA Project Documentation Form the fillable boxes are the maximum size allowed. Please edit answers so that they do not exceed this size. Minimum font size is 11 pt.
6. In the Texas TSA Project Documentation Form, the Professional Citations page should reflect all resources accessed to research and create the project. Use a standard professional format (APA, MLA, Chicago, etc). If there are no resources to cite, that should be stated here.
7. If AI was used to research or in the development of this project, the Texas AI Reflection page must be included.
8. If photos of identifiable people are used, a signed photo release must be included for each person.
9. (Optional) Students may add up to 4 pages of photo documentation of the creation of the project
10. If an event has extra documentation requirements listed in the rulebook, it must be included to avoid points deductions.

Project Judging Criteria

Judging will be based on the criteria set forth in this rulebook. Projects will be judged using a competition rubric. The scores from the rubric will be used to compare all other projects entered in that particular classification number. The primary goal for judges is to score all of the projects in a category number. Tie breaks will be done using a set order of the sections of the rubric.

- The most qualified judges available will be responsible for judging. To avoid a conflict of interest, Texas TSA judges cannot judge areas directly related to their school. The awards and decisions of the Judging/Oversight Committee are final.
- Only those individuals authorized by the Contest Director are allowed in the display area after judging begins. Violation of the display or competitive event competition may result in forfeiture of awards by the school, student, chapter, or entry involved or other action determined by the Contest Management Team.
- To be considered for the Best in State (BIS) patch, the individual entries must be awarded the first place award for their classification. BIS patches are not automatically given but must be purchased at the designated time.
- Documentation must be included for all projects to be judged. Review the Minimum Required Documentation section of the rulebook for instructions on what is needed. The documentation will be used by judges when evaluating the projects with the competition rubrics.
- Some sections, subsections, and events have extra documentation requirements. Judges should read the rulebook to determine the specific documentation requirements for each event.
- Advisors cannot be used to judge events in which they have students participating. Only with the permission of the Contest Director, will Event Coordinators be allowed to violate this rule.
- The same entry cannot be used in multiple classifications. Further clarification will be provided under each specific section.

Rulebook Updates

2026-2027 Rulebook Release Date - 9/15/26

Updates or changes - while every effort is made to find and fix all issues and problems with the rulebook before release, there are times when adjustments have to be made in the interest of clarification or logistics. Rulebook changes and clarifications will be posted in the Change Log.

Before your region contest and state contest, please check the change log to make sure there have been no changes made that might impact your entries.

Broken Links, Typos, formatting issue -

The 26-27 Texas TSA rulebook is in a new format, and while every effort was made to catch typos, broken links, and bad formatting issues there may be mistakes. If you have found an issue, please report it using the Report an issue form.

Request a new event or change to an event - The Texas TSA rulebook is an ever changing document. Events that have low or no entries are subject to removal and we are always on the lookout for new events to support education in the classroom and enhance your competitive experience. If you see a need or have an idea for a new UTE event or project, please take a few minutes to complete the Request New Event form.

Project Loading and Unloading

1. All move-in/move-out must be through the Commerce Street loading dock area.
2. Loading docks, freight doors and freight elevators are on the Commerce Street side of the convention center. Parking is not permitted at the Commerce Street loading docks for any reason. This area is designated for load-in/load-out only. Unattended vehicles are subject to being ticketed by the Fort Worth Police Department and towed at owner expense.
3. No parking in designated fire zones/lanes at any time, including load-in/load-out. Violators are subject to being ticketed by the Fort Worth Police Department and towed at owner expense.
4. Load-in/load-out is on a first come/first serve basis, four schools at a time.
5. Designated Texas TSA and/or Fort Worth Convention Center personnel are in charge of the convention center loading dock area. Do not enter or attempt to unload until instructed by these designated personnel.
6. No unattended vehicles in the loading dock area at any time.
7. Load-Out: Exhibit Hall doors will not be opened until after the last general session. Be courteous at all times. Vehicles will not be allowed at the loading docks until the load-out period. Do not enter the Commerce Street loading dock area until instructed to do so by the Fort Worth Convention Center or Texas TSA personnel. Again, no unattended vehicles in the loading dock area at any time. Properly identified participants will enter the hall from designated areas. Students will have to carry projects (or use dollies) to their vehicles.
8. All projects must have a claim check/ticket before they can be removed. (Or a properly identified chapter advisor can have his/her projects released).
9. Projects can be wrapped and/or prepared for shipment inside or outside of the Exhibit Hall, but not in the Loading Dock Area.

10. Extremely large trailer projects will be stored or exhibited at the Bus Parking Area.

Number of Entries Per Region

National Events

The number of entries that can advance varies based on the event. See the National Event section or the event guidelines for details.

Unique to Texas (UTE) On-Site Events & Projects

Each Region is allowed to advance 5 entries for each event to the state conference. These limits will be enforced and Regional Associations will not be provided additional slots.

Events

Event List

National Qualifying Events

UTE On-Site Events

UTE Projects

RECF Robotics



26-27 TX TSA HS EVENTS

National Events

- 1 HS Animatronics
- 2 HS Architectural Design
- 3 HS Audio Podcasting
- 4 HS Automated Manufacturing Systems
- 5 HS Biotechnology Design
- 6 HS Board Game Design
- 7 HS CAD - Architecture
- 8 HS CAD - Engineering
- 9 HS Chapter Team
- 10 HS Children's Stories
- 11 HS Data Science & Analytics
- 12 HS Debating Technological Issues
- 13 HS Digital Video Production
- 14 HS Dragster Design
- 15 HS Drone Challenge (UAV)
- 16 HS Engineering Design
- 17 HS Extemporaneous Speech
- 18 HS Fashion Design & Technology
- 19 HS Flight Endurance
- 20 HS Forensic Science
- 21 HS Future Technology & Engineering Teacher
- 22 HS Hybrid Racer XL
- 23 HS Manufacturing Prototype
- 24 HS Music Production
- 25 HS On Demand Video
- 26 HS Photographic Technology
- 27 HS Prepared Presentation
- 28 HS Promotional Design
- 29 HS Robotics
- 30 HS Software Development
- 31 HS STEM Mass Media
- 32 HS Structural Design & Engineering
- 33 HS Technology Bowl
- 34 HS Technology Problem Solving
- 35 HS Transportation Modeling

- 36 HS Video Game Design
- 37 HS Virtual Reality Simulation
- 38 HS Webmaster

Texas Special Events

- 1 HS Robotics - RECF Achieve

Unique to Texas Onsite Events

- 1 UTE HS Catapult/Trebuchet
- 2 UTE HS CO2 Research Racer - ABS Plastic
- 3 UTE HS CO2 Research Racer - Wood
- 4 UTE HS Computer Skills - Animation
- 5 UTE HS Computer Skills - Graphic Design
- 6 UTE HS Computer Skills - Multi-Media Presentation
- 7 UTE HS Drone Competition
- 8 UTE HS Graphic Solutions - Architecture and Construction
- 9 UTE HS Graphic Solutions - Bio-technology
- 10 UTE HS Graphic Solutions - Engineering Design
- 11 UTE HS Graphic Solutions - Information Technology
- 12 UTE HS Graphic Solutions - Manufacturing Design
- 13 UTE HS Graphic Solutions - Promotional Design and Marketing
- 14 UTE HS Graphic Solutions - Technology Problem Solving
- 15 UTE HS Hot Rod CO2 Car Competition - ABS Plastic
- 16 UTE HS Hot Rod CO2 Car Competition - Wood
- 17 UTE HS Promotional Video
- 18 UTE HS RC Vehicle
- 19 UTE HS Social Media Marketing

High School Unique to Texas Projects

- 1 HP00000 Exploratory - CNC/CAM
- 2 HP00100 Exploratory - Wood
- 3 HP00200 Exploratory - Metal
- 4 HP00300 Exploratory - Materials
- 5 HP01000 Exploratory - Graphic Design
- 6 HP01100 Exploratory - Multimedia
- 7 HP01200 Exploratory - Computer Science
- 8 HP01300 Exploratory - Photography
- 9 HP02000 Exploratory - Engineering
- 10 HP02100 Exploratory - Architecture
- 11 HP02200 Exploratory - Models
- 12 HP03000 Exploratory - Applied Science Display
- 13 HP03100 Exploratory - Applied Science Model/Prototype

14	HP10000 CNC/CAM Mill/Router/Lathe - Wood Single Piece
15	HP10001 CNC/CAM Mill/Router/Lathe - Wood 2 or More Parts
16	HP10002 CNC/CAM Mill/Router/Lathe - Wood a Pen, a Pencil or a Set
17	HP10003 CNC/CAM Mill/Router/Lathe - Any Material Other Than Wood Single Piece
18	HP10004 CNC/CAM Mill/Router/Lathe - Any Material Other Than Wood 2 or More Parts
19	HP10005 CNC/CAM Mill/Router/Lathe - Any Material Other Than Wood Pen, a Pencil, or
20	HP10100 CNC/CAM Laser Engraver - Wood Single Piece
21	HP10101 CNC/CAM Laser Engraver - Wood 2 or More Parts
22	HP10102 CNC/CAM Laser Engraver - Any Material Other Than Wood Single Piece
23	HP10103 CNC/CAM Laser Engraver - Any Material Other Than Wood 2 or More Parts
24	HP10200 CNC/CAM Plasma Cutter - Metal Single Piece
25	HP10201 CNC/CAM Plasma Cutter - Metal 2 or More Parts
26	HP10300 CNC/CAM Embroidery
27	HP10301 CNC/CAM Vinyl Cutter
28	HP10400 CNC/CAM 3D Printer/Rapid Prototype - Engineering Single Part
29	HP10401 CNC/CAM 3D Printer/Rapid Prototype - Engineering 2-5 Parts
30	HP10402 CNC/CAM 3D Printer/Rapid Prototype - Engineering 6 or More Parts
31	HP10403 CNC/CAM 3D Printer/Rapid Prototype - Architecture
32	HP10404 CNC/CAM 3D Printer/Rapid Prototype - Biomedical
33	HP10405 CNC/CAM 3D Printer/Rapid Prototype - All Other Subjects 1-5 parts
34	HP10406 CNC/CAM 3D Printer/Rapid Prototype - All Other Subjects 6 or more parts
35	HP11000 Manufacturing Wood Manually Turned a Pen, a Pencil or a Set
36	HP11001 Manufacturing Wood Manually Turned a Single or Multiple Parts
37	HP11100 Manufacturing Wood Indoor No Side Dimension to Exceed 6 x 36 x 36 inches
38	HP11101 Manufacturing Wood Indoor No Side Dimension to Exceed 24 x 24 x 96 inches
39	HP11102 Manufacturing Wood Indoor No Side Dimension to Exceed 36 x 36 x 96 inches
40	HP11103 Manufacturing Wood Indoor No Side Dimension to Exceed 48 x 48 x 96 inches
41	HP11104 Manufacturing Wood Indoor Size Exceeds 48+ x 48+ x 96+ inches
42	HP11200 Manufacturing Wood Outdoor No Side Dimension to Exceed 6 x 36 x 36 inches
43	HP11201 Manufacturing Wood Outdoor No Side Dimension to Exceed 24 x 24 x 96 inches
44	HP11202 Manufacturing Wood Outdoor No Side Dimension to Exceed 36 x 36 x 96 inches
45	HP11203 Manufacturing Wood Outdoor No Side Dimension to Exceed 48 x 48 x 96 inches
46	HP11204 Manufacturing Wood Outdoor Size Exceeds 48+ x 48+ x 96+ inches
47	HP12000 Manufacturing Metals Decorative Not to Exceed 6 x 36 x 36 inches
48	HP12001 Manufacturing Metals Decorative Not to Exceed 24 x 24 x 120 inches
49	HP12002 Manufacturing Metals Decorative Not to Exceed 36 x 36 x 120 inches
50	HP12003 Manufacturing Metals Decorative Not to Exceed 48 x 48 x 120 inches
51	HP12005 Manufacturing Metals Decorative Not to Exceed 72 x 72 x 120 inches
52	HP12100 Manufacturing Metals Functional Not to Exceed 6 x 36 x 36 inches
53	HP12101 Manufacturing Metals Functional Not to Exceed 24 x 24 x 120 inches

54	HP12102 Manufacturing Metals Functional Not to Exceed 36 x 36 x 120 inches
55	HP12103 Manufacturing Metals Functional Not to Exceed 48 x 48 x 120 inches
56	HP12104 Manufacturing Metals Functional Not to Exceed 60 x 60 x 120 inches
57	HP12105 Manufacturing Metals Functional Not to Exceed 72 x 72 x 120 inches
58	HP12106 Manufacturing Metals Functional Size Exceeds 72+ x 72+ x 120+ inches
59	HP12200 Trailers
60	HP13000 Materials PVC Not to Exceed 6 x 36 x 36 inches
61	HP13001 Materials PVC Not to Exceed 36 x 36 x 36 inches
62	HP13002 Materials PVC Size Exceeds 36+ x 36+ x 36+ inches
63	HP13100 Materials Manual Turned Any Material Other Than Wood Pen, a Pencil, or a Set
64	HP13101 Materials Manual Turned Any Material Other Than Wood Single or Multiple Part
65	HP13200 Materials Injection Molding
66	HP13202 Materials Casting
67	HP13203 Materials Reinforced Resins
68	HP13204 Materials Non-Acrylic
69	HP13205 Materials Composite
70	HP13206 Materials Acrylics
71	HP13207 Materials Fabric
72	HP13209 Materials Leather
73	HP13210 Materials Paper
74	HP13211 Materials Combination of Any Materials (No Wood or Metal)
75	HP13300 Wood/Metal Mixed Materials Not to Exceed 6 x 36 x 36 inches
76	HP13301 Wood/Metal Mixed Materials Not to Exceed 24 x 24 x 96 inches
77	HP13302 Wood/Metal Mixed Materials Not to Exceed 36 x 36 x 96 inches
78	HP13303 Wood/Metal Mixed Materials Not to Exceed 48 x 48 x 96 inches
79	HP13304 Wood/Metal Mixed Materials Size Exceeds 48+ x 48+ x 96+ inches
80	HP13400 Restoration Furniture
81	HP13401 Restoration Mechanical/Machine Devices
82	HP13402 Restoration Electrical/Appliances
83	HP13403 Restoration Toys
84	HP13500 Recycled Materials Wood
85	HP13501 Recycled Materials Metal
86	HP13502 Recycled Materials Electrical/Electronics
87	HP13503 Recycled Materials Plastic
88	HP13504 Recycled Materials Combination of 2 or More Materials
89	HP20000 Business Cards
90	HP20001 Certificate
91	HP20002 Flyer - Single Sheet
92	HP20003 Letterhead
93	HP20004 Calendar - Single Sheet

94	HP20005 Calendar - Multiple Sheets
95	HP20006 Folded Handout - Any Number of Printed Panels
96	HP20007 Thematic Poster 12 x 18 max size
97	HP20008 Thematic Portfolio to Promote a Business
98	HP20009 Safety Poster
99	HP20100 Bound Multiple Page Document
100	HP20101 Yearbook Layout
101	HP20102 Newsletter
102	HP20103 Magazine Layout
103	HP20200 Product Label
104	HP20201 Product Packaging
105	HP20202 Sticker Decal
106	HP20203 Computer Image Transfer
107	HP20204 Sublimation
108	HP20205 Screen Print Communication
109	HP20206 Product Advertisement
110	HP20300 Technical Report - Architecture and Construction
111	HP20301 Technical Report - Engineering Design
112	HP20302 Technical Report - Information Technology
113	HP20303 Technical Report - Bio-Technology
114	HP21000 Computer Generated Presentation 1-10 slides
115	HP21001 Computer Generated Presentation 11-20 slides
116	HP21100 Audio Editing - 30 sec max
117	HP21101 Audio Editing - 2 min max
118	HP21200 Video Editing - Video Commercial 15 sec precisely
119	HP21201 Video Editing - Video Commercial 30 sec precisely
120	HP21202 Video Editing - Video Commercial 60 sec precisely
121	HP21203 Video Editing - Video with Special Effects 30 sec precisely
122	HP21204 Video Editing - Video with Special Effects 60 sec precisely
123	HP21206 Video Editing - Video Promo/Instructional/Demo - 3 min max
124	HP21207 Video Editing - Video Album - 3 min max
125	HP21208 Video Editing - Video Newscast - 2 min max
126	HP21209 Video Editing - Original Short Film - 3 min max
127	HP21210 Video Editing - Original Musical with Original Student Music - 3 min max
128	HP21211 Video Editing - Video footage only
129	HP21212 Video Editing - Drone Videography 60 sec max
130	HP21300 Computer Generated Graphic Art - Cover Art
131	HP21301 Computer Generated Graphic Art - Original Character Turn Around Sheet
132	HP21302 Computer Generated Graphic Art - Original Landscape, Abstract, or Still Life (
133	HP21303 Computer Generated Graphic Art - Original Landscape, Abstract, or Still Life (

134	HP21304 Computer Generated Graphic Art - Original 3D Sci-Fi Image
135	HP21305 Computer Generated Graphic Art-Original 3D Other Than Sci-Fi Image
136	HP21306 Computer Generated Graphic Art - Desktop Wallpaper
137	HP21400 2D Animation - Animatic 60 sec max
138	HP21401 2D Animation - Story Based Animation 15 sec max
139	HP21402 2D Animation - Story Based Animation 30 sec max
140	HP21403 2D Animation - Story Based Animation 60 sec max
141	HP21404 2D Animation - Story Based Animation 3 min max
142	HP21405 2D Animation - Commercial 30 sec precisely
143	HP21406 2D Animation - Introduction 60 sec max
144	HP21407 2D Animation - Stop Motion 30 sec max
145	HP21501 3D Animation - Story Based Animation 15 sec max
146	HP21502 3D Animation - Story Based Animation 30 sec max
147	HP21503 3D Animation - Story Based Animation 60 sec max
148	HP21504 3D Animation - Story Based Animation 3 min max
149	HP21505 3D Animated Commercial - 30 sec precisely
150	HP21506 3D Animation - Introduction - 60 sec max
151	HP22000 Webpage Design - Individual Webpage
152	HP22001 Webpage Design - School Related Webpage
153	HP22002 Webpage Design - Commercial Related Webpage
154	HP22100 Video Game 2D
155	HP22101 Video Game 3D
156	HP22200 Program with text-based interface
157	HP22201 Program with graphical user interface
158	HP22202 Program made with a drag and drop language
159	HP23000 Advertising - Fashion (Color)
160	HP23001 Advertising - Fashion (B/W)
161	HP23002 Advertising - Food
162	HP23003 Advertising - Product
163	HP23100 Architecture - Aerial/Drone
164	HP23101 Architecture - Bridges
165	HP23102 Architecture - Buildings
166	HP23103 Architecture - Cityscapes
167	HP23104 Architecture - Industrial
168	HP23105 Architecture - Interior
169	HP23106 Architecture - Street Art (Includes Graffiti)
170	HP23200 Event - Social Cause
171	HP23201 Event - Life Events
172	HP23202 Events - Live Entertainment
173	HP23300 Nature - Aerial/Drone

174	HP23301 Nature - Animal/Pet (Color)
175	HP23302 Nature - Animal/Pet (B/W)
176	HP23303 Nature - Astrophotography
177	HP23304 Nature - Flowers
178	HP23305 Nature - Landscape (Color)
179	HP23306 Nature - Landscape (B/W)
180	HP23307 Nature - Macro
181	HP23308 Nature - Seasons
182	HP23309 Nature - Sunrise/Sunset
183	HP23310 Nature - Trees
184	HP23311 Nature - Wildlife
185	HP23400 Panoramic - Horizontal
186	HP23401 Panoramic - Vertical
187	HP23500 People - Children
188	HP23501 People - Culture
189	HP23502 People - Family
190	HP23503 People - Newborn/Baby
191	HP23504 People - Portrait
192	HP23505 People - Self Portrait
193	HP23506 People - Street Photography
194	HP23600 Photojournalism - Single Photo
195	HP23601 Photojournalism - 2 or More Photos
196	HP23602 Photojournalism - Travel Collage
197	HP23700 Photomanipulation - Background Manipulation
198	HP23701 Photomanipulation - Subject Manipulation
199	HP23800 Sports - Extreme Sports
200	HP23801 Sports - Motor Sports
201	HP23802 Sports - Indoor Individual/Team Sports
202	HP23803 Sports - Outdoor Individual/Team Sports
203	HP23900 Transportation - Automobile
204	HP23901 Transportation - Railway
205	HP23902 Transportation - Nautical
206	HP23903 Transportation - Aerospace
207	HP30000 Mechanical Engineering - Free Hand Sketch of a Single or Multiple Part Mecha
208	HP30001 Aerospace Engineering - Free Hand Sketch of an Aerospace Device or Structur
209	HP30002 Electronic Engineering - Free Hand Sketch of an Electronic Device. Pen or Pen
210	HP30003 Civil Engineering - Free Hand Sketch of a Civil Structure. Pen or Pencil Only.
211	HP30100 Mechanical Engineering - Working Drawings of a Single or Multiple Parts. Pen
212	HP30101 Mechanical Engineering - Working Drawings of a Single or Multiple Parts with a
213	HP30102 Mechanical Engineering - Working Drawings of a Single Part. [CADD]

214	HP30103 Mechanical Engineering - Working Drawings of 2-5 Mechanical Parts. [CADD]
215	HP30104 Mechanical Engineering - Working Drawings of 6-12 Mechanical Parts. [CADD]
216	HP30105 Mechanical Engineering - Working Drawings of 13 or More Mechanical Parts. [
217	HP30106 Mechanical Engineering - Working Drawings of a Single Part with a Pictorial Vie
218	HP30107 Mechanical Engineering - Working Drawings of 2-5 Mechanical Parts with a Pic
219	HP30108 Mechanical Engineering - Working Drawings of 6-12 Mechanical Parts with a Pi
220	HP30109 Mechanical Engineering - Working Drawings of 13 or More Mechanical Parts wi
221	HP30110 Mechanical Engineering - Working Drawings of Pipe Fabrication (Fluid Transpo
222	HP30111 Mechanical Engineering - Working Drawings of a Transportation Device with a
223	HP30112 Aerospace Engineering - Working Drawings of an Aerospace Device or Structur
224	HP30200 Mechanical Engineering - Pictorial View Only of a Single or Multiple Parts. Any
225	HP30201 Mechanical Engineering - Pictorial View Only of a Single Part. [CADD]
226	HP30202 Mechanical Engineering - Pictorial View Only of 2-5 Mechanical Parts. [CADD]
227	HP30203 Mechanical Engineering - Pictorial View Only of 6-12 Mechanical Parts. [CADD
228	HP30204 Mechanical Engineering - Pictorial View Only of 13 or More Mechanical Parts. [
229	HP30205 Mechanical Engineering - Pictorial View of Pipe Fabrication (Fluid Transportati
230	HP30206 Mechanical Engineering - Pictorial View of a Transportation Device. [CADD]
231	HP30207 Aerospace Engineering - Pictorial View of an Aerospace Device or Structure. [
232	HP30208 Electronic Engineering - Pictorial View of an Electronic Device. [CADD]
233	HP30209 Civil Engineering - Pictorial View of a Civil Structure. [CADD]
234	HP30300 Mechanical Engineering - Presentation View Only of a Single or Multiple Parts.
235	HP30301 Mechanical Engineering - Presentation View Only of a Single Part. [CADD]
236	HP30302 Mechanical Engineering - Presentation View Only of 2-5 Mechanical Parts. [CA
237	HP30303 Mechanical Engineering - Presentation View Only of 6-12 Mechanical Parts. [C
238	HP30304 Mechanical Engineering - Presentation View Only of 13 or More Mechanical Pa
239	HP30306 Mechanical Engineering - Presentation View of a Transportation Device. [CAD
240	HP30307 Aerospace Engineering - Presentation View of an Aerospace Device or Structu
241	HP30308 Electronic Engineering - Presentation View of an Electronic Device. [CADD]
242	HP30309 Civil Engineering - Presentation View of a Civil Structure. [CADD]
243	HP30400 Mechanical Engineering - Exploded Presentation View Only of 2-5 Mechanical
244	HP30401 Mechanical Engineering - Exploded Presentation View Only of 6-12 Mechanica
245	HP30402 Mechanical Engineering - Exploded Presentation View Only of 13 or More Mec
246	HP30403 Aerospace Engineering - Exploded Presentation View of an Aerospace Device
247	HP30404 Electronic Engineering - Exploded Presentation View of an Electronic Device. [
248	HP30500 Engineering Media - Original 3D Computer Image of a Mechanical Part or Parts
249	HP30501 Engineering Media - Animated Assembly or Mechanical Movement of Multiple
250	HP30502 Engineering Media - Animated Transpiration Device - 60 sec max
251	HP30503 Engineering Media - Engineering Presentation Animation Multiple Parts - 3 min
252	HP31000 Free Hand Sketch of an Architectural Structure. Pen or Pencil Only.
253	HP31001 Free Hand Sketch of Landscape. Pen or Pencil Only.

254	HP31100 Construction Drawings of a Tiny Home on a Trailer. Pen or Pencil Only.
255	HP31101 Construction Drawings of any Residential Structure. Pen or Pencil Only.
256	HP31102 Construction Drawings of any Commercial Structure. Pen or Pencil Only.
257	HP31103 Construction Drawings of a Tiny Home on a Trailer. [2D & 3D CADD]
258	HP31104 Construction Drawings of Residential Home under 2000 sq. ft HVAC [2D CAD
259	HP31105 Construction Drawings of Residential Home under 2000 sq. ft HVAC [3D CAD
260	HP31106 Construction Drawings of Residential Home over 2000 sq. ft HVAC [2D CADD]
261	HP31107 Construction Drawings of Residential Home over 2000 sq. ft HVAC [3D CADD]
262	HP31108 Construction Drawings of Residential Multistory Single Family Home under 20
263	HP31109 Construction Drawings of Residential Multistory Single Family Home under 20
264	HP31110 Construction Drawings of Residential Multistory Single Family Home over 200
265	HP31111 Construction Drawings of Residential Multistory Single Family Home over 200
266	HP31112 Construction Drawings of Apartment, Condo, Townhouse, Duplex [2D CADD]
267	HP31113 Construction Drawings of Apartment, Condo, Townhouse, Duplex [3D CADD]
268	HP31115 Construction Drawings of a Commercial Structure-Retail [3D CADD]
269	HP31116 Construction Drawings of a Commercial Structure-Restaurant [2D CADD]
270	HP31117 Construction Drawings of a Commercial Structure-Restaurant [3D CADD]
271	HP31118 Construction Drawings of a Commercial Structure-Other [2D CADD]
272	HP31119 Construction Drawings of a Commercial Structure-Other [3D CADD]
273	HP31120 Construction Drawings of a Commercial Structure - Mixed Use [2D CADD]
274	HP31121 Construction Drawings of a Commercial Structure - Mixed Use [3D CADD]
275	HP31122 Construction Drawings of a Recreational Facility/Public Structure [2D CADD]
276	HP31123 Construction Drawings of a Recreational Facility/Public Structure [3D CADD]
277	HP31124 Construction Drawings of a Residential Remodeling [2D CADD]
278	HP31125 Construction Drawings of a Residential Remodeling [3D CADD]
279	HP31126 Construction Drawings of Detailing of Architectural Elements [2D & 3D CADD]
280	HP31127 Construction Drawings of Architectural Landscape/Irrigation Plan. Any Metho
281	HP31200 Presentation Drawing - Any Method Other Than Computer.
282	HP31201 Presentation Drawing [2D CADD]
283	HP31202 Presentation Drawing [3D CADD]
284	HP31203 Presentation Drawing - Commercial/Public Structure - Any Method Other Than
285	HP31204 Presentation Drawing - Commercial/Public Structure [2D CADD]
286	HP31205 Presentation Drawing - Commercial/Public Structure [3D CADD]
287	HP31300 Architectural Media - Computer Generated Original 3D Image - Landscape
288	HP31301 Architectural Media - Computer Generated Original 3D Image - Architectural S
289	HP31302 Architectural Media - Architectural Walkthrough - 90 sec max
290	HP31303 Architectural Media - Architectural Flythrough - 90 sec max
291	HP31304 Architectural Media - Landscape Walkthrough - 90 sec max
292	HP31400 Residential Interior Design Material Sample Board
293	HP31401 Commercial Interior Design Material Sample Board

294	HP31402 Residential Illustrated Perspective Interior View. Any Method Other Than Com
295	HP31403 Commercial Illustrated Perspective Interior View. Any Method Other Than Co
296	HP31404 Residential Illustrated Perspective Interior View.[CADD]
297	HP31405 Commercial Illustrated Perspective Interior View.[CADD]
298	HP32000 Finish Model of a Residential Single Family Home
299	HP32001 Finish Model of a Residential Multifamily Home (Apartment, Condo, Townhou
300	HP32002 Finish Model of a Residential Structure not listed
301	HP32003 Finish Model of a Master Plan Development
302	HP32004 Finish Model of a Commercial Building
303	HP32005 Finish Model of a Public/Recreational Facility
304	HP32006 Finish Model of a Civil Structure
305	HP32007 Finish Model of a Space Structure
306	HP32100 Structural Model of a Single Family or Multifamily Residential Home
307	HP32200 Study Model of a Single Family or Multifamily Residential Home
308	HP32201 Study Model of a Commercial Building
309	HP32300 Kits - Woods
310	HP32301 Kits - Metals
311	HP32302 Kits - Electrical/Electronics
312	HP32303 Kits - Other
313	HP40000 Display of the Principles or Mechanics of Flight
314	HP40100 Portfolio of Biotech Health
315	HP40101 Display of Biotechnical Research or Applications
316	HP40200 Display of Construction Products, Processes or Techniques
317	HP40201 Display of a Construction Structure
318	HP40202 Display Illustrating the Differences of 2 or More Types of Structures
319	HP40203 Display of Materials Testing
320	HP40300 Display of Electrical Energy Storage Device
321	HP40301 Display of Electronic Communication System or Device
322	HP40302 Display of Properties of Electrical Components, Semi-Conductor or Non Semi
323	HP40303 Display of Robotic Applications
324	HP40400 Portfolio of a Comparison Study of Power Efficiency
325	HP40401 Display of Solar Energy
326	HP40402 Display of Electrical Energy and/or Power Generation
327	HP40403 Display of Hydraulics or Pneumatics
328	HP40404 Display of Fuel Resource, Exploration, Extraction, Processing & Utilization
329	HP40405 Display of the Generation of Electrical Energy from an Energy Source
330	HP40406 Display of a Power Grid
331	HP40407 Display of External/Internal Combustion Engines Operation and Utilization
332	HP40501 Display of an Organization Chart for a Manufacturing Company Including Job
333	HP40502 Display of 5 or More Production Career Opportunities

334	HP40600 Display of Cross-Curricular Learning Activities for 2 or More School Discipline
335	HP40700 Display of a Career in the Transportation Field
336	HP40701 Display of a Transportation Method
337	HP41000 Air Foil Testing for Automobiles, Airplanes, or Rockets
338	HP41100 Residential Wiring Mockup
339	HP41101 Prototype of Alarm Circuits
340	HP41102 Prototype of an Audio System or Communication Device
341	HP41103 Prototype of Electronic Games/Toys (non-kit)
342	HP41104 Prototype of Logic Circuits
343	HP41105 Prototype of an Electronic Device
344	HP41200 Robotic Programming any Computer Based Program
345	HP41201 Robot Using 2 Sensors & Only 1 Controlling Unit
346	HP41202 Robot Using 3 or More Sensors & Only 1 Controlling Unit
347	HP41203 V5 Robot Display



26-27 TX TSA MS EVENTS

National Events

- 1 MS Audio Podcasting
- 2 MS Biotechnology Design
- 3 MS CAD Foundations
- 4 MS Career Prep
- 5 MS Challenging Technology Issues
- 6 MS Chapter Team
- 7 MS Children's Stories
- 8 MS Coding
- 9 MS Community Service Video
- 10 MS Construction Challenge
- 11 MS Cyber Security
- 12 MS Data Science and Analytics
- 13 MS Digital Photography
- 14 MS Dragster
- 15 MS Electrical Applications
- 16 MS Flight
- 17 MS Forensic Technology
- 18 MS Inventions and Innovations
- 19 MS Leadership Strategies
- 20 MS Mass Production
- 21 MS Mechanical Engineering
- 22 MS Medical Technology Issues
- 23 MS Microcontroller Design
- 24 MS Off The Grid
- 25 MS Prepared Speech
- 26 MS Problem Solving
- 27 MS Promotional Marketing
- 28 MS Solar Racer
- 29 MS STEM Animation
- 30 MS Structural Engineering
- 31 MS System Control Technology
- 32 MS Technical Design
- 33 MS Technology Bowl
- 34 MS Video Game Design
- 35 MS Website Design

Texas Special Events

- 1 MS Robotics - RECF Achieve
- 2 MS Robotics - RECF Engage

Unique to Texas Onsite Events

- 1 UTE MS Catapult/Trebuchet
- 2 UTE MS CO2 Research Racer - ABS Plastic
- 3 UTE MS CO2 Research Racer - Wood
- 4 UTE MS Computer Skills - Animation
- 5 UTE MS Computer Skills - Graphic Design
- 6 UTE MS Computer Skills - Multi-Media Presentation
- 7 UTE MS Drone Competition
- 8 UTE MS Graphic Solutions - Communication Technology
- 9 UTE MS Graphic Solutions - Computer Applications
- 10 UTE MS Graphic Solutions - Construction Technology
- 11 UTE MS Graphic Solutions - Energy, Power & Transportation Technology
- 12 UTE MS Graphic Solutions - Manufacturing Technology
- 13 UTE MS Graphic Solutions - Technology Problem Solving
- 14 UTE MS Hot Rod CO2 Car Competition - ABS Plastic
- 15 UTE MS Hot Rod CO2 Car Competition - Wood
- 16 UTE MS Promotional Video
- 17 UTE MS RC Vehicle
- 18 UTE MS Social Media Marketing

Middle School School Unique to Texas Projects

- 1 MP10000 CNC/CAM Mill/Router/Lathe - Wood Single Piece
- 2 MP10001 CNC/CAM Mill/Router/Lathe - Wood 2 or More Parts
- 3 MP10002 CNC/CAM Mill/Router/Lathe - Wood a Pen, a Pencil or a Set
- 4 MP10004 CNC/CAM Mill/Router/Lathe - Any Material Other Than Wood 2 or More Parts
- 5 MP10100 CNC/CAM Laser Engraver - Wood Single Piece
- 6 MP10101 CNC/CAM Laser Engraver - Wood 2 or More Parts
- 7 MP10102 CNC/CAM Laser Engraver - Any Material Other Than Wood Single Piece
- 8 MP10103 CNC/CAM Laser Engraver - Any Material Other Than Wood 2 or More Parts
- 9 MP10200 CNC/CAM Plasma Cutter - Metal Single Piece
- 10 MP10300 CNC/CAM Other - Embroidery
- 11 MP10400 CNC/CAM 3D Printer/Rapid Prototype - Engineering Single Part
- 12 MP10401 CNC/CAM 3D Printer/Rapid Prototype - Architectural Single Part
- 13 MP10402 CNC/CAM 3D Printer/Rapid Prototype - Biomedical Single Part
- 14 MP10403 CNC/CAM 3D Printer/Rapid Prototype - Any Other Subject Single Part
- 15 MP10404 CNC/CAM 3D Printer/Rapid Prototype - Engineering 2-5 Parts
- 16 MP10405 CNC/CAM 3D Printer/Rapid Prototype - Engineering 6 or More Parts

- 17 MP10406 CNC/CAM 3D Printer/Rapid Prototype - All Other Subjects 2-5 parts
- 18 MP10407 CNC/CAM 3D Printer/Rapid Prototype - All Other Subjects 6 or more parts
- 19 MP11000 Manufacturing Wood Manually Turned Pen, a Pencil or a Set
- 20 MP11001 Manufacturing Wood Manually Turned Single or Multiple Parts Any Length
- 21 MP11100 Manufacturing Wood Indoor No Side Dimension to Exceed 6 x 36 x 36 inches
- 22 MP11101 Manufacturing Wood Indoor No Side Dimension to Exceed 24 x 24 x 96 inches
- 23 MP11102 Manufacturing Wood Indoor No Side Dimension to Exceed 36 x 36 x 96 inches
- 24 MP11103 Manufacturing Wood Indoor No Side Dimension to Exceed 48 x 48 x 96 inches
- 25 MP11104 Manufacturing Wood Indoor Exceeds Other Sizes 49+ x 49+ x 49+ inches
- 26 MP11200 Manufacturing Wood Outdoor No Side Dimension to Exceed 6 x 36 x 36 inches
- 27 MP11201 Manufacturing Wood Outdoor No Side Dimension to Exceed 24 x 24 x 96 inches
- 28 MP11202 Manufacturing Wood Outdoor No Side Dimension to Exceed 36 x 36 x 96 inches
- 29 MP11203 Manufacturing Wood Outdoor No Side Dimension to Exceed 48 x 48 x 96 inches
- 30 MP11204 Manufacturing Wood Outdoor Exceeds 49+ x 49+ x 49+ inches
- 31 MP12000 Manufacturing Metals Decorative Not to Exceed 6 x 36 x 36 inches
- 32 MP12001 Manufacturing Metals Decorative Not to Exceed 24 x 24 x 120 inches
- 33 MP12002 Manufacturing Metals Decorative Not to Exceed 36 x 36 x 120 inches
- 34 MP12003 Manufacturing Metals Decorative Not to Exceed 48 x 48 x 120 inches
- 35 MP12105 Manufacturing Metals Functional Not to Exceed 72 x 72 x 120 inches
- 36 MP13001 Other Materials PVC Not to Exceed 36 x 36 x 36 inches
- 37 MP13100 Other Materials Manual Turned Any Material Other Than Wood Pen, a Pencil, o
- 38 MP13200 Other Materials Injection Molding
- 39 MP13202 Other Materials Casting
- 40 MP13203 Other Materials Reinforced Resins
- 41 MP13205 Other Materials Composite
- 42 MP13207 Other Materials Fabric
- 43 MP13209 Other Materials Leather
- 44 MP13210 Other Materials Paper
- 45 MP13211 Other Materials Combination of 2 or More Materials (No Wood or Metal)
- 46 MP13300 Wood/Metal Mixed Materials Not to Exceed 6 x 36 x 36 inches
- 47 MP13301 Wood/Metal Mixed Materials Not to Exceed 24 x 24 x 96 inches
- 48 MP13302 Wood/Metal Mixed Materials Not to Exceed 36 x 36 x 96 inches
- 49 MP13400 Restoration Furniture
- 50 MP13401 Restoration Mechanical/Machine Devices
- 51 MP13403 Restoration Toys
- 52 MP13500 Recycled Materials Wood
- 53 MP13503 Recycled Materials Plastic
- 54 MP13504 Recycled Materials Combination of 2 or More Recycled Materials
- 55 MP20000 Business Cards/Name Tags, Etc.
- 56 MP20001 Certificate

57	MP20003 Spreadsheet Minimum Of 5 Columns and 5 Rows
58	MP20004 A Word-Processing Document, Any Subject - No Graphics
59	MP20005 A Word-Processing Document - With Graphics
60	MP20007 Thematic Poster 12x18 max size
61	MP20008 Safety Poster
62	MP20100 Flyer Single Sheet
63	MP20101 Product Specification Sheets
64	MP20102 Owners/Operators Manual
65	MP20103 Folded Handout 1-2 Printed Panels
66	MP20104 Folded Handout 3-4 Printed Panels
67	MP20105 Folded Handout 5 Or More Printed Panels
68	MP20106 Newsletter
69	MP20200 Screen Print - One Color - Hand Cut
70	MP20207 Computer Generated Design Transfer - Multi-Color
71	MP20209 Sticker Decal
72	MP20210 Product Label
73	MP20211 Computer Image Transfer
74	MP20213 Screen Print Communication - One Color On Paper, Fabric, or Container.
75	MP21000 Computer Based Multimedia Entries With Academic Themes
76	MP21001 Computer Based Multimedia Entries With Technology Themes
77	MP21002 Slide Series - Max Of 20 Slides
78	MP21200 Still Capture - 1 Frame Capture From Video
79	MP21202 Video Capture - Multiple Frame
80	MP21300 Student Original - Computer Graphics - B/W
81	MP21301 Student Original - Computer Graphics - Color
82	MP21303 Student Edited - Computer Graphics - Color
83	MP21400 Computer Animation Subject: Any Area - 60 sec max
84	MP21401 Computer Animation Subject: Safety - 60 sec max
85	MP22000 Webpage Design - Individual Webpage
86	MP22002 Webpage Design - Commercial Related Webpage
87	MP22100 Video Game 2D
88	MP22101 Video Game 3D
89	MP22200 Program with text-based interface
90	MP22202 Program made with a drag and drop language
91	MP23000 Advertising - Fashion (Color)
92	MP23001 Advertising - Fashion (B/W)
93	MP23002 Advertising - Food
94	MP23003 Advertising - Product
95	MP23100 Architecture - Aerial/Drone
96	MP23101 Architecture - Bridges

97	MP23102 Architecture - Buildings
98	MP23103 Architecture - Cityscapes
99	MP23104 Architecture - Industrial
100	MP23105 Architecture - Interior
101	MP23106 Architecture - Street Art (Includes Graffiti)
102	MP23200 Event - Social Cause
103	MP23201 Event - Life Events
104	MP23202 Events - Live Entertainment
105	MP23300 Nature - Aerial/Drone
106	MP23301 Nature - Animal/Pet (Color)
107	MP23302 Nature - Animal/Pet (B/W)
108	MP23303 Nature - Astrophotography
109	MP23304 Nature - Flowers
110	MP23305 Nature - Landscape (Color)
111	MP23306 Nature - Landscape (B/W)
112	MP23307 Nature - Macro
113	MP23308 Nature - Seasons
114	MP23309 Nature - Sunrise/Sunset
115	MP23310 Nature - Trees
116	MP23311 Nature - Wildlife
117	MP23400 Panoramic - Horizontal
118	MP23500 People - Children
119	MP23501 People - Culture
120	MP23502 People - Family
121	MP23503 People - Newborn/Baby
122	MP23504 People - Portrait
123	MP23505 People - Self Portrait
124	MP23506 People - Street Photography
125	MP23600 Photojournalism - Single Photo
126	MP23601 Photojournalism - 2 or More Photos
127	MP23602 Photojournalism - Travel Collage
128	MP23700 Photomanipulation - Background Manipulation
129	MP23800 Sports - Extreme Sports
130	MP23801 Sports - Motor Sports
131	MP23802 Sports - Indoor Individual/Team Sports
132	MP23803 Sports - Outdoor Individual/Team Sports
133	MP23900 Transportation - Automobile
134	MP23901 Transportation - Railway
135	MP23902 Transportation - Nautical
136	MP23903 Transportation - Aerospace

137	MP30000 Mechanical Engineering - Free Hand Sketch of a Single or Multiple Part Mecha
138	MP30100 Mechanical Engineering - Working Drawings of a Single or Multiple Parts. Pen
139	MP30101 Mechanical Engineering - Working Drawings of a Single or Multiple Parts. [CAD
140	MP30102 Mechanical Engineering - Working Drawings of a Single Part with a Pictorial Vie
141	MP30103 Mechanical Engineering - Working Drawings of 2 or More Mechanical Parts. [C
142	MP30104 Mechanical Engineering - Working Drawings of 2 or More Mechanical Parts wit
143	MP30201 Mechanical Engineering - Pictorial View Only of a Single or Multiple Parts. [CA
144	MP30300 Mechanical Engineering - Presentation View Only of a Single or Multiple Parts.
145	MP31000 Free Hand Sketch of an Architectural Structure. Pen or Pencil Only.
146	MP31100 Construction Drawings of a Residential Home of Any Type [CADD]
147	MP32000 Finish Model of a Residential Home
148	MP32003 Finish Model of a Civil Structure
149	MP32004 Finish Model of a Mechanical Device
150	MP32300 Kits - Wood
151	MP32301 Kits - Metal
152	MP32302 Kits - Electrical/Electronics
153	MP32303 Kits - Other
154	MP40000 Multidisciplinary
155	MP40001 Stem Career Display
156	MP40100 Output Interface
157	MP40101 Input Controlled Interface
158	MP40200 Energy Mechanical
159	MP40201 Energy Heat
160	MP40202 Energy Electrical
161	MP40203 Energy Nuclear
162	MP40204 Energy Light
163	MP40205 Energy Alternative
164	MP40300 Power Heat
165	MP40301 Power Electrical
166	MP40302 Power Chemical
167	MP40303 Power Nuclear
168	MP40304 Power Light
169	MP40305 Power Hydraulic
170	MP40306 Power Pneumatic
171	MP40400 Transportation Land
172	MP40401 Transportation Sea
173	MP40402 Transportation Air
174	MP40403 Transportation Space
175	MP40404 Transportation Stationary (Conveyors)
176	MP40405 Transportation Systems/Industries

- 177 MP40500 Robotics Programming To 25 Lines Max
- 178 MP40501 Robotics Programming To 26 Lines Or More
- 179 MP40502 Robotics Robot Display
- 180 MP40503 Robotics Remote Operated Vehicle Display

National Events

Important

National Events are events that can be competed at the regional, state and national level. The National Competitive Events Guide can be downloaded from the Total TSA dashboard once your chapter has finalized affiliation with National TSA. These rules and requirements may be modified at the state and regional levels. Details on what national events are offered and how they are managed at the Texas state conference are posted on the Event Guidelines.

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.

Rules Modifications

Due to time limits and other extenuating circumstances, Texas TSA reserves the rights to make modifications on how it conducts National Events at Texas TSA State Contest. Individual event coordinators must have any such modifications approved by the National Event Managers at State Contest. These may include the following:

1. Shortening the contest time or interview time allowed
2. Only having 1 round for public performance style events
3. Limiting the number of teams interviewed in the final round

Rule modifications should be procedural only and not affect the intent of the competition rules.



26-27 HS Rulebook

National Events

Event	# Entries per Chapter	# Entries per Region
HS Animatronics	Region Limit Only	3
HS Architectural Design	2	3
HS Artificial Intelligence (AI)	1	3
HS Audio Podcasting	Region Limit Only	3
HS Automated Manufacturing Systems	2	3
HS Biotechnology Design	1	3
HS Board Game Design	Region Limit Only	3
HS CAD - Architecture	2	3
HS CAD - Engineering	2	3
HS Chapter Team	1	3
HS Children's Stories	Region Limit Only	3
HS Cybersecurity	1	3
HS Data Science & Analytics	Region Limit Only	3
HS Debating Technological Issues	Region Limit Only	2
HS Digital Video Production	Region Limit Only	3
HS Dragster Design	2	3
HS Drone Challenge (UAV)	Region Limit Only	3
HS Engineering Design	Region Limit Only	3
HS Extemporaneous Speech	Region Limit Only	2
HS Fashion Design & Technology	Region Limit Only	3
HS Flight Endurance	2	3
HS Forensic Science	1	3
HS Future Technology & Engineering Teacher	2	3
HS Hybrid X Racer	1	3
HS Interior Design	Region Limit Only	3
HS Manufacturing Prototype	1	3
HS Music Production	Region Limit Only	3
HS On Demand Video	1	3
HS Photographic Technology	1	3
HS Prepared Presentation	Region Limit Only	2
HS Promotional Design	Region Limit Only	3

HS Robotics - Modified for TexasSee UTE	3 by invitation only	
Special Events for Details		
HS Software Development	1	3
HS STEM Mass Media	1	3
HS Structural Design & Engineering	1	3
HS Technology Bowl	1	3
HS Technology Problem Solving	1	3
HS Transportation Modeling	1	3
HS Video Game Design	Region Limit Only	3
HS Virtual Reality (VR)	1	3
HS Vlogging	2	3
HS Webmaster	1	3



26-27 MS Rulebook

National Events

Event	# Entries per Chapter	# Entries per Region
MS Audio Podcasting	2	3
MS Biotechnology Design	Region Limit Only	3
MS CAD Foundations	Region Limit Only	3
MS Career Prep	1	3
MS Challenging Technology Issues	Region Limit Only	2
MS Chapter Team	1	3
MS Children's Stories	Region Limit Only	3
MS Coding	1	3
MS Community Service Video	1	3
MS Construction Challenge	1	3
MS Cyber Security	3	3
MS Data Science and Analytics	Region Limit Only	3
MS Digital Photography	Region Limit Only	3
MS Dragster	2	3
MS Drone Challenge		3
MS Electrical Applications	1	3
MS Flight	2	3
MS Forensic Technology	1	3
MS Inventions and Innovations	1	3
MS Leadership Strategies	Region Limit Only	2
MS Mass Production	1	3
MS Mechanical Engineering	1	3
MS Medical Technology Issues	Region Limit Only	3
MS Microcontroller Design	1	3
MS Off The Grid	Region Limit Only	3
MS Prepared Speech	Region Limit Only	2
MS Problem Solving	1	3
MS Promotional Marketing	1	3
MS Robotics - Modified for TexasSee UTE Special Events for Details	3 per chapter by invitation only	
MS Solar Racer	1	3
MS STEM Animation	Region Limit Only	3

MS Structural Engineering	1	3
MS System Control Technology	Region Limit Only	3
MS Technical Design	1	3
MS Technology Bowl	1	3
MS Video Game Design	1	3
MS Website Design	1	3



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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26-27 MS 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.

Middle School

Event	Team Limit
UTE MS CO2 Research Racer - Wood	Individual
UTE MS 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.

Middle School

Event	Team Limit
UTE MS Hot Rod CO2 Car Competition - Wood	Individual
UTE MS 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.

Middle School

Event

UTE MS 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!

Middle School

Event

UTE MS 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.

Middle School

Event

UTE MS 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.

Middle School

Event

Team Limit

UTE MS Computer Skills - Animation	Individual
UTE MS Computer Skills - Graphic Design	Individual
UTE MS 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.

Middle School

Event	Team Limit
UTE MS Graphic Solutions - Technology Problem Solving	Individual
UTE MS Graphic Solutions - Communication Technology	Individual
UTE MS Graphic Solutions - Computer Applications	Individual
UTE MS Graphic Solutions - Construction Technology	Individual
UTE MS Graphic Solutions - Energy, Power & Transportation Technology	Individual
UTE MS Graphic Solutions - Manufacturing 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.

Middle School

Event	Team Limit
UTE MS 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.

Middle School

Event	Team Limit
UTE MS Social Media Marketing	Team of 2 to 4 Students

2027 Hot Rod CO2 Car



Hot Rod CO2 Car 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 Hot Rod 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.

Theme:

2027: Hot Rod/Classic Gasser must include an engine, seat, exhaust, removable body shroud or hinged hood to expose the engine compartment, and roll cage.

Rules

- Hot Rod must be powered by one 8 gram CO2 cart ridge.
- Hot Rod must fit onto a standard CO2 track.
- If a car fails the initial weigh in, the race officials may provide the student with an opportunity to bring the Hot Rod up or down to weight limits.
- Any Hot Rod deemed unsafe by judges will not be raced.
- All parts must be made of either wood or plastic. Glass and/or metal parts will be deemed unsafe. Exceptions: axles and guide lugs may be metal, plastic or wood.
- All decisions of weight, size limits, or safety are the responsibility of the judges. The judge's decisions are final.
- A car must remain in safe and operable condition after all racing and be capable of safely racing again to be eligible for an award.

Specifications

Length	8 inches minimum and 12 inches maximum
Width	2 5/8 inches minimum and 4 1/4 inches maximum
Weight	100 grams minimum
Power Plant Chamber Wall Thickness	1/8 inch minimum
Power Plant Chamber Depth	1 7/8 inches minimum and 2 1/8 inches maximum
Center of Power Plant to Race Surface	1 1/8 inches minimum and 1 7/8 inches maximum
Required Number of Guide Lugs	2 (Minimum of 4 in apart)

Required Equipment:

Front mounted engine with side exhaust pipes

Optional Equipment:

Driver, pinstripes, decals or stickers, engine wiring and anything else to enhance the realistic look of the truck.

Documentation

The competitor will provide an Engineering Portfolio that will be submitted in a three brad clear front portfolio cover (No binders allowed. [Example portfolio](#)). The Event Coordinator will provide each competitor a sticker for their portfolio and Hot Rod. The competitor will place the stickers on the outside of the folder at the top right corner of the front cover. The Engineering Portfolio must include:

- Cover page with Student ID#, Category #, Category Name and a 3"x5" picture of Hot Rod
- Table of Contents
- Research on the yearly theme
- Detailed design drawings to scale, no larger than 11" X 17", of all parts, sub-assemblies or final car with appropriate dimensions
- Student explanation of their design
- Pictures documenting the process the build process (2 pages maximum)
- Professionally Cited Sources for Research

Judging

- 25% Appearance: Quality of craftsmanship and appearance
- 25% Engineering Portfolio: Completeness and detail level of the required elements
- 50% Race Results: Points will be awarded based upon race times

Each Hot Rod will be judged based on the rubric for this event. For race results, 1st place will receive 10 points, 2nd place will receive 9 points, 3rd place will receive 8 points... points continue decreasing by one point per place through 10th place. In case of a tie, the Hot Rod with the highest engineering portfolio score will place higher.

Research Racer CO2 Car

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 meters) 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.

Rules

- Racer must be powered by one 8 gram CO2 cartridge.
- Racer must fit onto a standard CO2 track.
- If a car fails the initial weigh in, the race officials may provide the student with an opportunity to bring the racer up or down to weight limits.
- Any Racer deemed unsafe by judges will not be raced.
- All parts must be made of either wood or plastic. Glass and/or metal parts will be deemed unsafe. Exceptions: Guide lugs can be metal and axles may be metal, plastic or wood.
- All decisions of weight, size limits, or safety are the responsibility of the judges. The judge's decisions are final.
- A car must remain in a safe and operable condition after all racing and be capable of safely racing again to be eligible for an award.
- Racer must have (4) wheels that freely rotate and make contact with the racing surface in the starting gate of the race.

Specifications

Length	6 inches minimum and 12 inches maximum
Width	1 inch minimum and 4 inches maximum
Weight	30 grams minimum and 60 grams maximum
Power Plant Chamber Wall Thickness	1/8 inch minimum
Power Plant Chamber Depth	1 7/8 inches minimum and 2 1/8 inches maximum
Center of Power Plant to Race Surface	1 1/8 inches minimum and 1 7/8 inches maximum
Required Number of Guide Lugs	2 (Minimum of 4 inches apart)

Documentation

The competitor will provide an Engineering Portfolio that will be submitted in a three brad clear front portfolio cover (No binders allowed. [Example portfolio](#)). The Event Coordinator will provide each competitor a sticker for their portfolio and Research Racer. The competitor will place the stickers on the outside of the folder at the top right corner of the front cover. The Engineering Portfolio must include:

- Cover page with Student ID#, Category #, Category Name and a 3"x5" picture of the Racer
- Table of Contents
- Research for the design concept
- Detailed design drawings to scale, no larger than 11" X 17", of all parts, sub-assemblies or final car with appropriate dimensions
- Student explanation of their design
- Pictures documenting the build process (2 pages maximum)
- Professionally Cited Sources for Research

Judging

- 25% Appearance: Quality of craftsmanship and appearance
- 25% Engineering Portfolio: Completeness and detail level of the required elements
- 50% Race Results: Points will be awarded based upon race times

Each Racer will be judged based on the rubric for this event. For race results, 1st place will receive 10 points, 2nd place will receive 9 points, 3rd place will receive 8 points... points continue decreasing by one point per place through 10th place. In case of a tie, the Racer with the highest engineering portfolio score will place higher.

Description

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.

Rules

- The race will be divided into heats by classification. Each heat will have between 2-4 cars each.
- The winner of each heat will advance to the next round. The number of teams entered will determine the number of rounds.
- Each round will consist of a five lap race.
- The final round will consist of an eight lap race.
- A car must be operational and on the track at the end of a race or it will be disqualified.
- All radios/controllers must be impounded, except when contestants are racing, until all races are over. Failure to return your radio/controller to the impound area will mean disqualification from the contest.
- Someone from your race team must act as a corner marshal at all times during your race.
- **Operating RC cars at any time in any area other than the designated competition area without permission from the event coordinators will result in disqualification.**

Specifications

The specifications listed below are maximum values and not absolutes. Vehicles will pass inspection as long as they do not exceed these specifications.

- Length: 435 mm maximum length
- Width: 210 mm maximum width
- Construction Type: Student Assembled. No RTR vehicles allowed.
- Drivetrain: 2WD or 4WD allowed
- Motor: Brushed 540-size, minimum 30-turn winding. Brushless motors are prohibited.
- Radio: 2.4GHz
- Batteries: 2S LiPo or LiHV, maximum 5000 mAh capacity. Maximum voltage at technical inspection: 8.44 V.
- driving-assistance systems, such as gyros/AVC/traction-control receivers are prohibited

Documentation

The competitor will provide an Engineering Portfolio that will be submitted in a three brad clear front portfolio cover (No binders allowed. [Example portfolio](#)). Place the State Contest sticker received at registration on the outside of the folder at the top right corner of the front cover. The Engineering Portfolio must include:

- Cover page with Student ID#, Category #, and Category Name.
- Table of Contents
- Signed Liability Release Forms
- Detailed list of all parts and components purchased. Also list any parts made using 3D printer, CNC machining and other equipment to make your own parts.
- Part cutsheets that provide the manufacturer's data about the specifications for each part or component not made by the student. Do not remove product stickers from parts.

RC Vehicle - Electric

This helps the judges identify that the correct parts listed and cut sheets were used.

Removing stickers could result in disqualification of the vehicle.

- Student explanation of their build process
- Pictures documenting the process the build process
- Professionally Cited Sources for Research

Judging

- 25% Appearance: Quality of craftsmanship and appearance. Awarded 1st through number of valid entries.
- 25% Engineering Portfolio: Completeness and detail level of the Engineering Portfolio. Awarded 1st through number of valid entries.
- 50% Race Results: Points will be awarded based upon race times.

Each racer will be awarded 1st through the number of valid entries for appearance, engineering portfolio and race results. The lowest combined score wins 1st Place, the second lowest combined score wins 2nd Place, and so on. In case of a tie, the car with the highest scoring engineering portfolio will place higher.

2027 Drone Racer



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!

Rules

- Each team will build their drone either from individual parts or a kit. **Ready to fly drones purchased will not be accepted.**
- Teams must consist of a minimum of two (2) student members with a maximum of three (3) student members.
- Time begins when the drone leaves the starting position. Time ends after the pilot has successfully landed on each smart meter's landing pad, navigated through each communication gate, and landing at the ending position.
- Teams must maneuver their drone to a landing pad to collect smart meter data, then fly through a race gate to submit data back to headquarters. Each landing pad and race gate may only be used once to collect points. The order and path taken can be determined by each team.
- One team member other than the pilot will be designated to enter the enclosure to return a downed drone to the take-off position. The judge will give permission when it is safe to enter the enclosure. The drone is not allowed to restart props until the team member is completely out of the closure and the judge has given the all clear to resume. The timer will continue to run during this time, the clock will not be stopped.
- The judges may disqualify any team for any safety infraction.
- All radios/controllers must be impounded, except when contestants are flying, until all flights are over. Failure to return your radio/controller to the impound area will mean disqualification from the contest.
- Any team flying their drone outside of the drone enclosure will be immediately disqualified. This includes any location inside or outside of the Fort Worth Convention Center during the dates of the Texas TSA State Competition.
- Missed race gates or landing pads will result in a time penalty.

Specifications

Length	12 inches x 12 inches maximum
Height	6 inches maximum
Weight	250 grams maximum with battery
Battery Size	2s maximum
Propeller Size	3 1/2" maximum
Number of Rotors	4

- Must not receive or use GPS
- Must not have any object avoidance systems
- Drone must be controlled via handheld remote (no cell phones) and pilot may use FPV goggles but not required.

Safety Requirements

- All drones must have propeller guards/shrouds that at a minimum enclose all propeller arcs on the outside of the drone.
- The Coordinator may call for an Emergency Stop at any time if they determine that a drone is unsafe due to unsafe equipment or unsafe piloting.
- All team members must wear OSHA approved (Z87.1) clear safety glasses at all times.
- All team members must wear OSHA approved hard hats at all times inside the drone marked safety zone around the perimeter of the drone enclosure. Texas TSA will not supply hard hats. Teams without hard hats will not be allowed to fly.
- All team members must have a signed Texas TSA Liability Release form physically with them at the Drone Contest. Not having the Texas TSA Liability Release form disqualifies that member from competing as part of the Team during the Drone Contest.

Drone Racer

- Each team and their drone will be inspected prior to flight to ensure compliance with all safety rules.
- All drone controllers must be powered off and turned in to the Drone Contest Director at the beginning of the contest. No other drones will be allowed to be turned on during the Contest to ensure that there is no interference between the current pilot and the current drone.
- There will not be any opportunity for practice flights prior to the beginning of the Drone Contest. Drones are not allowed to be powered on in any area of the Fort Worth Convention Center during the Texas TSA State Conference.
- All team members must remain in the designated areas at all times during the flight.
- The Pilot must be in the Pilot Box at all times during that team's flight. Additional team members must remain in Team Box areas at the back corners of the Designated Contest Area.
- Teams waiting to compete will be instructed where to wait by the Drone Contest Director at the beginning of the contest.
- All control of the UAV must be through direct inputs to the controller by the pilot, without any autopilot, flight, or navigational aids, with the exception of auto takeoff and landing functions.
- Teams using a UAV that does not conform to these rules will not be permitted to use it at the competition.
- Each team must use their own drone for the competition.

Documentation

The competitor will provide an Engineering Portfolio that will be submitted in a three brad clear front portfolio cover (No binders allowed. [Example portfolio](#)). The Event Coordinator will provide each team a sticker for their portfolio, drone and controller. The teams will place the stickers on the outside of the folder at the top right corner of the front cover. The Engineering Portfolio must include:

- Cover page with Student ID#, Category #, Category Name and a 3"x5" picture of the Drone
- Table of Contents
- Research for the design concept
- Detailed design drawings to scale, no larger than 11" X 17", of all parts, sub-assemblies or final car with appropriate dimensions
- Student explanation of their design
- Pictures documenting the build process (2 pages maximum)
- Professionally Cited Sources for Research

Judging

- 25% Appearance: Quality of craftsmanship and appearance
- 25% Engineering Portfolio: Completeness and detail level of the required elements
- 50% Race Results: Points will be awarded based upon race times

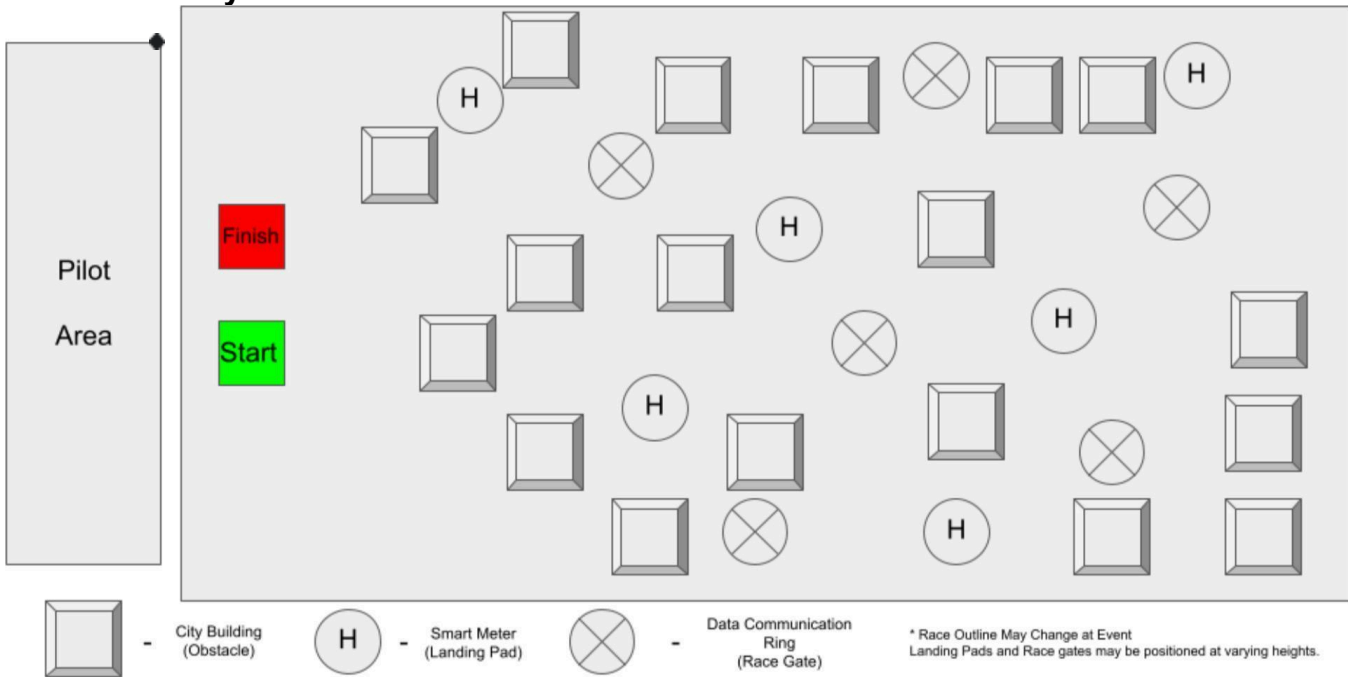
Each Racer will be judged based on the rubric for this event. For race results, 1st place will receive 10 points, 2nd place will receive 9 points, 3rd place will receive 8 points. Points continue decreasing by one point per place through 10th place. In case of a tie, the Racer with the highest engineering portfolio score will place higher.

Example Kits (not limited to these kits):

<https://www.pitsco.com/products/drone-maker-kit>

https://www.amazon.com/dp/B0C1YYCK2P?ref_=cm_sw_r_cp_ud_dp_YB3EVDYQA4XY8NM1WZIX

2027
Drone Racer
Field Layout



Race Gate Dimensions:
Inner diameter: 14.5 in (37cm)
Outer diameter: 23.6 in (60cm)

<https://newbeedrone.com/collections/racing-flying-accessories/products/balloon-gate>



Dia.: 21.65inch
Double-Side Printed: Blue / Orange

Landing Pad Dimensions:
Diameter: 21.65 in (55cm)
<https://www.amazon.com/dp/B07N1CQJ33/>

Race Gate Link: <https://newbeedrone.com/collections/racing-flying-accessories/products/balloon-gate>

Landing Pad Link: <https://a.co/d/0b58hu8X>

Catapult Competition

Description

A catapult is a mechanism used to forcefully propel 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 to be able to shoot arrows and darts as well as stones at enemy soldiers.

Team

A team is made of 2-4 members. All team members must be present during launching/competition time.

Operating Catapults at any time in any area other than the designated competition area without permission from the event coordinators will result in disqualification.

Design Constraints

- Design Envelope is 30" (Length) x 18" (Width) x 24" (Height) with arm in locked/launching position. The throwing arm cannot unfold or transform during launch. The total weight of the unloaded catapult may not exceed fifteen (15) pounds.
- The catapult may have any type of spring mechanism to power the arm, but all parts must be contained in the design envelope stated above.
- The device must be a Mangonel style catapult (No Ballista or crossbow style catapults allowed). No catapult or catapult/catapult hybrids are allowed.
- No use of commercial catapult kits or components. The design and construction should demonstrate proof of the Team's efforts.
- Teams are allowed to use the following:
 - PVC
 - 3D Printed Components (a limit of 6 in³ of material)
 - Plastic
 - Wood
 - Hardware (nuts, bolts, washers, fasteners, etc...)
 - Paracord, Rope, etc.
 - Glue
- The following materials may not be used:
 - Glass
 - Flammable, corrosive, or explosive materials
 - Compounds that produce odors or gases.
- The catapult must be stable and remain stationary in its launch position (within reason). The base of the catapult must accommodate the provided ballast. Ballast will be in the form of two (2) 25 lbs. bags of sand.
- The triggering device, swing arm, and pivot must be constructed in a safe way, so as not to damage the device during launching, the testing area, or cause harm to others. This may result in an automatic safety disqualification.
- The catapult must have a pull cord that is a minimum of five (5) feet long. The pull cord must be attached to the triggering mechanism and used to activate the launching of the catapult.
- The launch arm must have a sling or cup/basket to hold the projectile. No moving cradle or moving basket may be used. No parts other than the projectile or pull cord are allowed to become disconnected during launching
- The catapult cannot have wheels.

Safety Requirements

- Safety is of utmost concern. Remember there is an element of danger with creating and operating a siege weapon. Catapults will be inspected for safety. Any loose parts must be tightened or the catapult will be deemed unfit and disqualified. No parts other than the projectile are allowed to become disconnected from the catapult at any time and must be securely attached prior to participating in the competition.
- After check in, teams are NOT allowed to modify their device, unless instructed to do so by the judge. If a device fails inspection the judge reserves the right to deem the device unsatisfactory and thus disqualifying the team. A device fails inspection by being a possible safety hazard or it violates any construction criteria.
- If the catapult becomes inoperable or unsafe, it must be removed immediately from the competition.
- When the catapult is on display/not in performance mode, it must be fully disabled and unable to be launched.
- Teams must wear OSHA approved safety glasses.
- If at any time an official declares "CEASE FIRE", all testing must stop and the timer will be stopped as well.

Projectile

Projectile is a hollow plastic practice golf ball (approximate weight of 14.5 grams each). Teams will be given a container of 3 dozen plastic golf balls as their ammunition. No further ammunition is allowed and no "re-firing" of projectiles that miss the target. Here is the type of projectile that will be used:

<https://a.co/d/0ftcNpiK>

Target

The target is a collapsible chipping net golf target – Similar to the one found here:

<https://a.co/d/2PESgnW>

The center of the scoring net will be approximately 15' from the firing line. The scoring net will consist of 3 concentric circles. The outer circle is approximately 24" in diameter and the inner circle is 7" in diameter.

Procedure

- All catapults must be placed directly on the firing line with the front of the catapult being "ON" the line.
- All teams will be provided an opportunity to make 3 practice shots before the official testing begins.
- For official testing, each team will have 2 minutes (120 seconds) to launch as many shots firing one ball at a time as possible. The official signal to commence testing is "FIRE". The goal is to accumulate as many points as possible in the net target in the time provided. Teams must cease fire at the end of allotted time.
- If at any time an official declares "CEASE FIRE", all testing must stop and the timer will be stopped as well.
- Team members must collect all ammunition once the time limit is up and return it to the judges.

Catapult Competition

Scoring

Center Circle/Inner Target= 5 points for each ball

Middle Circle/Middle Target= 3 points for each ball

Outermost Circle/Outer Target= 1 point for each ball

Ammunition (plastic golf balls) must enter the target on the fly. No "bounce in" points will be allowed/awarded. Ties will be broken as follows:

- the team with the highest score and least amount of ammunition pieces in the target.
- the team with the shortest time recorded to score the most points.

Documentation

The competitor will provide an Engineering Portfolio that will be submitted in a three brad clear front portfolio cover (No binders allowed. [Example portfolio](#)). The Event Coordinator will provide each competitor a sticker for their portfolio and catapult. The competitor will place the stickers on the outside of the folder at the top right corner of the front cover. The Engineering Portfolio must include:

- Cover page with Student ID#, Category #, Category Name and a 3"x5" picture of catapult
- Table of Contents
- Research on the use and design of a catapult
- Detailed design drawings to scale, no larger than 11" X 17", of all parts, sub-assemblies or final catapult with appropriate dimensions
- Student explanation of their design
- Pictures documenting the process the build process (2 pages maximum)
- Signed Liability Release Forms for all team members
- Professionally Cited Sources for Research

Judging

- 25% Appearance: Quality of craftsmanship and appearance
- 25% Engineering Portfolio: Completeness and detail level of the required elements
- 50% Scoring Results: Points will be awarded based upon timed scoring

Each catapult will be judged based on the rubric for this event. For scoring results, 1st place will receive 10 points, 2nd place will receive 9 points, 3rd place will receive 8 points... points continue decreasing by one point per place through 10th place. In case of a tie, the catapult with the highest engineering portfolio score will place higher.

Catapult Go/No Go Checklist

1. Does the team have the completed Engineering Portfolio?	Yes / No
2. Does the entire team have safety glasses on?	Yes / No
3. Is the catapult ballast ready?	Yes / No
4. Is the catapult made of the correct materials?	Yes / No
5. Does the catapult meet the size requirements?	Yes / No
6. Does the catapult launch with a pull cord of at least 5 feet?	Yes / No
7. Does the catapult have a safe launching mechanism?	Yes / No
8. Is the catapult safe to operate?	Yes / No

OVERVIEW

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.

TIME LIMITS

- **A.** The video must be no longer than sixty (60) seconds in length. A deduction of five (5) points will be incurred for exceeding the time limit.
- **B.** Participants have twenty four (24) hours, beginning at the event orientation meeting, to complete the entire production.

ATTIRE

TSA competition attire is required for this event.

PROCEDURE

ON-SITE CHALLENGE

- **A.** Participants report to the event area at the time and place stated in the conference app to receive the on-site challenge information.
- **B.** The event coordinator distributes the materials, information, directions, and deadlines to each team.
- **C.** Each team supplies its own video production and editing equipment to complete its entry.
- **D.** Teams are responsible for submitting a HYPERLINK of their video solution, and the Student Copyright Checklist to the designated submission form at conference.
- **E.** Entries are reviewed by judges with neither students nor advisors are present at this time.
- **F.** The top three (3) finalists are announced at the award ceremony.

REGULATIONS AND REQUIREMENTS

Students will work to develop their leadership and 21st century skills in the process of preparing for and participating in this TSA competitive event. The development and application of those skills must be evident in their submission, demonstration, and/or communication pertaining to the entry.

A. Participants produce a video while observing the following:

1. Participants film their footage, which must be appropriate for the TSA community, only at officially sanctioned conference locations, as described by the event coordinator.
 - a. Teams are not allowed to film in sleeping rooms, restrooms, restaurants, or elevators/ escalators.
 - b. Participants may not disturb any event in progress, enter a restricted evaluation area, interrupt a conference function, or participate in behavior unbecoming of a conference participant.
 - c. At the event meeting, the event coordinator explains any further filming restrictions on the specific property.
 - d. Failure to follow these instructions will result in disqualification.
2. All entries become the property of TSA and will not be returned after judging.
3. Teams may use no more than one (1) video camera for the video production.
4. Teams must edit their projects on a nonlinear editing system or their camera. Teams are responsible for providing their own editing equipment.
5. All video footage must be the original work of the team and must have been completed during the event timeline.
6. Where applicable, all ideas, test images and sound from other sources must be cited. Copyrighted materials may NOT be used. NOTE: Failure to follow this procedure results in disqualification.

B. On-site Submission Information:

1. Participants may choose any video hosting site (such as an UNLISTED YouTube URL), or a shareable link in cloud storage, as long as the video is located online and accessible for evaluation.
2. The URL must point directly to the participant's entry. Entries that require a software download or a request that access be granted will not be judged.
3. Entries received, or changes made to submitted entries after the deadline will not be judged.
4. Participants must complete the Student Copyright Checklist (see Forms Appendix) and save it as a multi-page PDF to be submitted electronically with the entry online. Failure to include the Student Copyright Checklist will result in disqualification.
5. The submission form will have a separate link for the documentation portfolios.
6. If the entry contains images of people, proof of consent must be provided for each person in the video.
7. Minors require parental consent. Use the Photo/Film/Video Consent and Release form (see Forms Appendix) for any individuals included in the video footage.
8. Texas TSA will NOT provide wireless Internet.

EVALUATION

- A. The completed video production.

Refer to the official rating form for more information.

STEM INTEGRATION

This event aligns with the STEM (Science, Technology, Engineering, and Mathematics) educational standards.

LEADERSHIP AND 21ST CENTURY SKILLS DEVELOPMENT

This event provides opportunity for students to build and develop leadership and 21st century skills including but not limited to:

- Communication
- Collaboration/Social Skills
- Initiative
- Problem Solving/Risk Taking
- Critical Thinking
- Perseverance/Grit
- Creativity
- Relationship Building/Teamwork
- Dependability/Integrity
- Flexibility/Adaptability

CAREERS RELATED TO THIS EVENT

This competition has connections to one (1) or more of the careers below:

- Actor
- Audio/video operator or technician
- Cinematographer
- Film/video editor
- Screen editor
- Script writer

OVERVIEW

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.

TIME LIMITS/CONSTRAINTS

- **A.** The social media content must be at least 5 posts but not more than 7. A deduction of five (5) points will be incurred for exceeding the post limit.
- **B.** Participants have twenty four (24) hours, beginning at the event orientation meeting, to complete the entire production.

ATTIRE

TSA competition attire is required for this event.

PROCEDURE

ON-SITE CHALLENGE

- **A.** Participants report to the event area at the time and place stated in the conference app to receive the on-site challenge information.
- **B.** The event coordinator distributes the materials, information, directions, and deadlines to each team.
- **C.** Each team supplies its own cell phone and editing equipment to complete its entry.
- **D.** Teams are responsible for submitting a PDF of their solution, and the Student Copyright Checklist to the designated submission form at conference.
- **E.** Entries are reviewed by judges with neither students nor advisors are present at this time.
- **F.** The top three (3) finalists are announced at the award ceremony.

REGULATIONS AND REQUIREMENTS

Students will work to develop their leadership and 21st century skills in the process of preparing for and participating in this TSA competitive event. The development and application of those skills must be evident in their submission, demonstration, and/or communication pertaining to the entry.

A. Participants produce a social media campaign while observing the following:

1. Participants create their social media content, which must be appropriate for the TSA community, only at officially sanctioned conference locations, as described by the event coordinator.
 - a. Teams are not allowed to film in sleeping rooms, restrooms, restaurants, or elevators/ escalators.
 - b. Participants may not disturb any event in progress, enter a restricted evaluation area, interrupt a conference function, or participate in behavior unbecoming of a conference participant.
 - c. At the event meeting, the event coordinator explains any further filming restrictions on the specific property.
 - d. Failure to follow these instructions will result in disqualification.
2. All entries become the property of TSA and will not be returned after judging.
3. Teams are restricted to filming with a cell phone only, no video cameras.
4. Teams must edit their projects on a nonlinear editing system or their cell phone. Teams are responsible for providing their own editing equipment.
5. All video/camera footage must be the original work of the team and must have been completed during the event timeline.
6. Where applicable, all ideas, test images and sound from other sources must be cited. Copyrighted materials may NOT be used. NOTE: Failure to follow this procedure results in disqualification.

B. On-site Submission Information:

1. Participants will create content on an Instagram template. Content will be saved as a single PDF file and uploaded. Social Media Content must be presented as a static PDF off-line. No content can be posted to an active social media account.

2. The submission form will have a separate link for the documentation portfolio. Documentation portfolio will include the following:

- Title Page (1 page)
- Table of Contents; pages as needed
- Description/Inspiration of Social Media Campaign. Description should include audience, hashtags, etc. (1 page)
- Instagram posts on template; pages as needed
- List of hardware, software, and apps used in the development of the Social Media Content. (1 page)
- List of references that includes sources for materials (non-copyrighted); pages as needed
- Completed Student Copyright Checklist, as applicable (see Forms) Failure to include the Student Copyright Checklist will result in disqualification.

3. If the entry contains images of people, proof of consent must be provided for each person in the video.

4. Minors require parental consent. Use the Photo/Film/Video Consent and Release form (see Forms Appendix) for any individuals included in the video footage.

5. Texas TSA will NOT provide wireless Internet.

EVALUATION

A. The completed social media content and documentation portfolio.

Refer to the official rating form for more information.

STEM INTEGRATION

This event aligns with the STEM (Science, Technology, Engineering, and Mathematics) educational standards.

LEADERSHIP AND 21ST CENTURY SKILLS DEVELOPMENT

This event provides opportunity for students to build and develop leadership and 21st century skills including but not limited to:

- Communication
- Collaboration/Social Skills
- Initiative
- Problem Solving/Risk Taking
- Critical Thinking
- Perseverance/Grit
- Creativity
- Relationship Building/Teamwork
- Dependability/Integrity
- Flexibility/Adaptability

CAREERS RELATED TO THIS EVENT

This competition has connections to one (1) or more of the careers below:

- Social Media Specialist
- Social Media Manager
- Community Manager
- Influencer Marketing
- Digital Creator
- Social Media Consultant



26-27 HS Rulebook

High School Unique to Texas Projects

High School Unique to Texas Projects (UTE-Projects) are events that are unique to the state of Texas and can be competed at the regional and state level.

Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students ONLY have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Exploratory

These events are designed for high school students who are beginners to explore the different areas of the UTE-Projects. While students who place in the top five in each event will earn awards, the points do not count towards school awards. All projects must include the required documentation and refer to the High School Event Guidelines for submission directions.

Section 0.0 Manufacturing

Documentation for these events must include:

- Texas TSA Documentation form
- Bill of Materials form

CNC/CAM

Event

Details

Event #

Exploratory CNC/CAM	Use CNC/CAM to create a fidget toy that is made of at least 2 parts. Fidget toy must not exceed 6"x6"x6". All parts must be designed by the student. No Thingiverse or similar downloads.	HP00000
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Wood

Event	Details	Event #
Exploratory - Wood	Build a birdhouse with overall dimensions not to exceed 10" deep x 12" wide x 12" tall. Birdhouse should have an opening, a perch, anchor point to hang or to mount, and painted or stained ext	HP00100

Metal

Event	Details	Event #
Exploratory - Metal	Build a table top traditional windmill. The blades need to be able to turn. Overall dimensions not to exceed 10" deep x 10" wide x 18" tall.	HP00200

Materials

Event	Details	Event #
Exploratory - Materials	Create an interactive pet toy made from 2 or more materials. At least 1 material must be a recycled material. Maximum size of the toy is 12"x12"x12"	HP00300

Section 0.1 Graphic Arts, Multimedia, Computer Science, and Photography

Documentation for these events must include:

- Texas TSA Documentation form

Multimedia

Event	Details	Event #
Exploratory - Multimedia	Make a how to video explaining how to make a paper airplane. Video should include directions and visual demonstration. Video not to exceed 60 seconds.	HP01100

Graphic Design

Event	Details	Event #
Exploratory - Graphic Design	Create a flyer advertising a meeting, event, or opportunity for your local TSA chapter. Be sure to include date, time, location, and other information that a potential attendee might need to know.	HP01000

Computer Science

Event	Details	Event #
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Exploratory - Computer Science	Design an Algorithm: Submit a student-developed procedure/function/method that contains sequencing, selection, and iteration. Use code comments to identity the following: • procedure name • sequencing • selection • iteration • inputs (if any) • outputs (if any) Include a code comment at the top of the document that describes what the procedure does/what function it serves (can be a stand-alone algorithm or part of a larger program).	HP01200
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Photography

Event	Details	Event #
Exploratory - Photography	Capture a moment with your camera that includes an activity you enjoy outside of school. Refer to the photography section of the rulebook for allowable processing. The photograph needs to be color and submitted as a virtual submission.	HP01300

Section 0.2 Technical Design

Documentation for these events must include:

- Texas TSA Document form

Engineering

Event	Details	Event #
Exploratory - Engineering	Create the top, front, and right view sketch of the following power tool. All views must fit on 1 sheet of paper, size 8.5"x11".	HP02000

Architecture

Event	Details	Event #
Exploratory - Architecture	Free hand sketch any exterior view of this house. Pen or Pencil only on 8.5" x 11" white cardstock paper.	HP02100

Models

Event	Details	Event #
Exploratory - Models	Create a scale model of "She Shed" that is 8'x16'. Include floor plan and interior elevations on the inside of the model with a removable roof. Model is limited to an 8.5"x11" footprint.	HP02200

Section 0.3 Applied Technical Science

The project footprint should not exceed 24"x36"

Documentation for these events must include:

- Texas TSA Documentation form
- Bill of Materials form

Applied Science Display

Event	Details	Event #
Exploratory - Applied Science Display	Propose an experimental design to test the efficacy of a novel vaccine. Include the process to create the vaccine, the clinical trials process, and biotechnology related immunoassays required to test the vaccine's effectiveness against the virus. Describe the expected results if the vaccine is effective if it is not effective.	HP03000

Applied Science Prototype

Event	Details	Event #
Exploratory - Applied Science Model/Prototype	Create a new wind generator prototype. The wind generator needs to include the wind harnessing mechanism and base structure. Also, a one page (maximum length) explanation of the prototype and the process that it uses to convert the wind to energy.	HP03100



26-27 HS Rulebook

High School Unique to Texas Projects

High School Unique to Texas Projects (UTE-Projects) are events that are unique to the state of Texas and can be competed at the regional and state level.

Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students **ONLY** have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Manufacturing

These events are designed for students manufacturing unique work using a variety of modern techniques. All projects must include the required documentation and refer to the High School Event Guidelines for submission directions.

Section 1.0 CNC/CAM and 3D Printing

Computer Numerical Control (CNC), Computer Aided Manufacturing (CAM), or 3D Printing devices are used by students to create project entries in this section. Any projects in which CNC mills, lathes, routers, laser engravers, 3D Printers, or similar devices were not used to produce all major components should not be entered in this category.

Students are responsible for the design, material selection, and any assembly necessary to complete the project. Components such as hardware can be purchased but must be included in the documentation form.

Documentation for these events must include:

- The Texas TSA Documentation form
- The Bill of materials form
- The CAD drawings used to create the projects. May include as sheets as needed but sheets should not exceed 11" x 17".

Mill/Router/Lathe

Event	Event #
CNC/CAM Mill/Router/Lathe - Wood Single Piece	HP10000
CNC/CAM Mill/Router/Lathe - Wood 2 or More Parts	HP10001
CNC/CAM Mill/Router/Lathe - Wood a Pen, a Pencil or a Set	HP10002
CNC/CAM Mill/Router/Lathe - Any Material Other Than Wood Single Piece	HP10003
CNC/CAM Mill/Router/Lathe - Any Material Other Than Wood 2 or More Parts	HP10004
CNC/CAM Mill/Router/Lathe - Any Material Other Than Wood Pen, a Pencil, or a Set	HP10005

Laser Engraver

Event	Event #
CNC/CAM Laser Engraver - Wood Single Piece	HP10100
CNC/CAM Laser Engraver - Wood 2 or More Parts	HP10101
CNC/CAM Laser Engraver - Any Material Other Than Wood Single Piece	HP10102
CNC/CAM Laser Engraver - Any Material Other Than Wood 2 or More Parts	HP10103

Plasma Cutter

Event	Event #
CNC/CAM Plasma Cutter - Metal Single Piece	HP10200
CNC/CAM Plasma Cutter - Metal 2 or More Parts	HP10201

Other CNC/CAM

Event	Event #
CNC/CAM Embroidery	HP10300

CNC/CAM Vinyl Cutter	HP10301
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3D Printing

Event	Event #
CNC/CAM 3D Printer/Rapid Prototype - Engineering Single Part	HP10400
CNC/CAM 3D Printer/Rapid Prototype - Engineering 2-5 Parts	HP10401
CNC/CAM 3D Printer/Rapid Prototype - Engineering 6 or More Parts	HP10402
CNC/CAM 3D Printer/Rapid Prototype - Architecture	HP10403
CNC/CAM 3D Printer/Rapid Prototype - Biomedical	HP10404
CNC/CAM 3D Printer/Rapid Prototype - All Other Subjects 1-5 parts	HP10405
CNC/CAM 3D Printer/Rapid Prototype - All Other Subjects 6 or more parts	HP10406

Section 1.1 Wood

Items in this section involve student created projects in which students used traditional and modern woodworking tools, methods, and techniques to create projects. Projects may contain minimal use of CNC mills, lathes, computer-controlled lasers, etc. Projects that used CNC mills, lathes, computer-controlled lasers, etc. for more than 80% of fabrication of the total project should not be entered in this category. Students are responsible for the design, material selection, and any assembly necessary to complete the project.

Purchased materials such as glass, mirrors, and hardware must be listed in documentation and do not count as an additional construction material.

Documentation for these events must include:

- Texas TSA Documentation form
- Bill of Materials Form

Manual Turning

Projects in this category are crafted using traditional lathe and turning tools. Example projects include but not limited to lamps, candlesticks, walking canes, and bowls.

Event	Event #
Manufacturing Wood Manually Turned a Pen, a Pencil or a Set	HP11000
Manufacturing Wood Manually Turned a Single or Multiple Parts	HP11001

Indoor

Projects in this category are entirely made of wood for the primary use to be indoors. Example projects include but not limited to bookshelves, tables, dressers, display cabinets, and bed headboards.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event	Event #
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Manufacturing Wood Indoor No Side Dimension to Exceed 6 x 36 x 36 inches	HP11100
Manufacturing Wood Indoor No Side Dimension to Exceed 24 x 24 x 96 inches	HP11101
Manufacturing Wood Indoor No Side Dimension to Exceed 36 x 36 x 96 inches	HP11102
Manufacturing Wood Indoor No Side Dimension to Exceed 48 x 48 x 96 inches	HP11103
Manufacturing Wood Indoor Size Exceeds 48+ x 48+ x 96+ inches	HP11104

Outdoor

Projects in this category are entirely made of wood for the primary use to be outdoors. Example projects include but not limited to Projects in this category are entirely made of wood for the primary use to be outdoors. Example projects include but not limited to picnic tables, outdoor furniture, tiki stands, and swings.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event	Event #
Manufacturing Wood Outdoor No Side Dimension to Exceed 6 x 36 x 36 inches	HP11200
Manufacturing Wood Outdoor No Side Dimension to Exceed 24 x 24 x 96 inches	HP11201
Manufacturing Wood Outdoor No Side Dimension to Exceed 36 x 36 x 96 inches	HP11202
Manufacturing Wood Outdoor No Side Dimension to Exceed 48 x 48 x 96 inches	HP11203
Manufacturing Wood Outdoor Size Exceeds 48+ x 48+ x 96+ inches	HP11204

Section 1.2 Metal

Items in this section involve student created projects in which students used traditional and modern metal trade tools, methods, and techniques to create projects. Projects may contain minimal use of CNC mills, lathes, computer-controlled lasers, plasma cutters, etc. Projects that used CNC mills, lathes, computer-controlled lasers, plasma cutters, etc. for more than 80% of fabrication of the total project should not be entered in this category. Students are responsible for the design, material selection, and any assembly necessary to complete the project.

Purchased materials such as glass, mirrors, and hardware must be listed in documentation and do not count as an additional construction material.

Documentation for these events must include:

- Texas TSA Documentation form
- Bill of Materials Form

Decorative

Projects in this category are entirely made of metal for the primary use to be for decoration. Example projects include but not limited to signs, yard art, table inlays, and name plates.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event	Event #
Manufacturing Metals Decorative Not to Exceed 6 x 36 x 36 inches	HP12000
Manufacturing Metals Decorative Not to Exceed 24 x 24 x 120 inches	HP12001
Manufacturing Metals Decorative Not to Exceed 36 x 36 x 120 inches	HP12002
Manufacturing Metals Decorative Not to Exceed 48 x 48 x 120 inches	HP12003
Manufacturing Metals Decorative Not to Exceed 72 x 72 x 120 inches	HP12005

Functional

Projects in this category are entirely made of metal for the primary use to perform a function. Example projects include but not limited to bumpers, fire pits, grills/smokers, and farm equipment.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event	Event #
Manufacturing Metals Functional Not to Exceed 6 x 36 x 36 inches	HP12100
Manufacturing Metals Functional Not to Exceed 24 x 24 x 120 inches	HP12101
Manufacturing Metals Functional Not to Exceed 36 x 36 x 120 inches	HP12102
Manufacturing Metals Functional Not to Exceed 48 x 48 x 120 inches	HP12103
Manufacturing Metals Functional Not to Exceed 60 x 60 x 120 inches	HP12104
Manufacturing Metals Functional Not to Exceed 72 x 72 x 120 inches	HP12105
Manufacturing Metals Functional Size Exceeds 72+ x 72+ x 120+ inches	HP12106

Trailer

Projects in this category mostly made of metal for the primary use as a trailer. Other materials are permitted to be used. Trailer must have a tongue and at least one axle.

Single and double axle trailers are allowed. Due to space limitations trailers cannot exceed a total length of 24'-0" from tongue to tail.

For the 2027 State Conference - trailers will be judged off site. Refer to the event guidelines for details

Event	Event #
Trailers	HP12200

Section 1.3 Other Materials

Projects in this section are entirely made of one material other than wood or metal. Example projects include but not limited to RC car body, walking cane, artistic statue, PVC catapult, and drinking glass.

Documentation for these events must include:

- Texas TSA Documentation form
- Bill of Materials Form

PVC

Event	Event #
Materials PVC Not to Exceed 6 x 36 x 36 inches	HP13000
Materials PVC Not to Exceed 36 x 36 x 36 inches	HP13001
Materials PVC Size Exceeds 36+ x 36+ x 36+ inches	HP13002

Material Turning

Event	Event #
Materials Manual Turned Any Material Other Than Wood Pen, a Pencil, or a Set	HP13100
Materials Manual Turned Any Material Other Than Wood Single or Multiple Parts of any length	HP13101

Other Materials

Event	Event #
Materials Injection Molding	HP13200
Materials Casting	HP13202
Materials Reinforced Resins	HP13203
Materials Non-Acrylic	HP13204
Materials Composite	HP13205
Materials Acrylics	HP13206
Materials Fabric	HP13207
Materials Leather	HP13209
Materials Paper	HP13210
Materials Combination of Any Materials (No Wood or Metal)	HP13211

Wood/Metal Mixed Materials

Combination Material projects in this section are made of 2 or more materials including wood and metal. Example projects include but not limited to wood and resin table tops, wood and metal furniture, and stained glass and metal yard art.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Must combine at least 2 different materials with one being either wood or metal. The other material can be wood/metal/other as listed.

Event	Event #
Wood/Metal Mixed Materials Not to Exceed 6 x 36 x 36 inches	HP13300
Wood/Metal Mixed Materials Not to Exceed 24 x 24 x 96 inches	HP13301
Wood/Metal Mixed Materials Not to Exceed 36 x 36 x 96 inches	HP13302
Wood/Metal Mixed Materials Not to Exceed 48 x 48 x 96 inches	HP13303
Wood/Metal Mixed Materials Size Exceeds 48+ x 48+ x 96+ inches	HP13304

Restoration

Restoration items that were originally commercially manufactured and have been restored to their original state.

Project Documentation must also include the following items:

- A work history must accompany the entry showing the condition of the item before the restoration.
- All parts not reconditioned by the student must be identified.
- Photos documenting the restoration process

Event	Event #
Restoration Furniture	HP13400
Restoration Mechanical/Machine Devices	HP13401
Restoration Electrical/Appliances	HP13402
Restoration Toys	HP13403

Recycled

Recycled projects must be made out of a minimum of 50% recycled materials. A recycled material is defined by using a component or material in a way that it was not originally designed for. An example would be using bathroom tissue rolls to create the inner structure of a foot stool, using license plates to create the outline of Texas, or using painted plastic spoons to create a decorative mirror.

Project Documentation must also include the following items:

- A work history showing the recycled item before construction.
- Photos documenting the construction process

Event	Event #
Recycled Materials Wood	HP13500
Recycled Materials Metal	HP13501
Recycled Materials Electrical/Electronics	HP13502

Recycled Materials Plastic

HP13503

Recycled Materials Combination of 2 or More Materials

HP13504



26-27 HS Rulebook

High School Unique to Texas Projects

High School Unique to Texas Projects (UTE-Projects) are events that are unique to the state of Texas and can be competed at the regional and state level.

Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students ONLY have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Graphic Arts, Multimedia, Computer Science and Photography

These events are designed for students using technology to produce graphics, photos, and programs to be used in a variety of ways. All projects must include the required documentation and refer to the High School Event Guidelines for submission directions.

Section 2.0 Graphic Design

Items in this section involve student created projects in which students design elements (such as typography and images) to convey information or create an effect. Projects are limited to 8 ½" x 11" unless otherwise stated in the category details.

For project submission it is recommended that projects are placed in the same clear front portfolio cover as the documentation. For projects such as a t-shirt, place the project and portfolio in a 1 gallon ziplock bag.

Copyright names and images cannot be used. All graphics and pictures must be original work of the student. Use of AI applications are prohibited. Use of Copyrighted information or AI will result in disqualification of entry.

Documentation for these events must include:

- Texas TSA Documentation form
- Additional items as identified in the different sections.

Business Documents

Event	Details	Event #
Business Cards	Provide (4) different design options on 8.5" x 11" paper. Choose (1) Final Design and provide a cardstock version not to exceed 3.5"x3.5". Standard business cards are 3.5"x2".	HP20000
Certificate	Certificate must include Type of Certificate, Reason for Certification, Certificate Recipient, and Certificate Presenter.	HP20001
Flyer - Single Sheet	Provide a printed informational sheet for an event. Example - promotional handout for a benefit concert, CTSO fundraiser, car show, etc.	HP20002
Letterhead	Must include Company Name, Logo, Phone Number, Address, and any other business information.	HP20003
Calendar - Single Sheet	All 12 months on one sheet with a minimum of one picture or image. Size not to exceed 12"x18".	HP20004
Calendar - Multiple Sheets	All 12 months bound using a binding method. Size not to exceed 12"x18".	HP20005
Folded Handout - Any Number of Printed Panels	Max paper size is 8.5 x 11. May include: invitations, greeting cards, menus, etc.	HP20006
Thematic Poster 12 x 18 max size	Must follow the yearly conference theme set by Texas TSA	HP20007
Thematic Portfolio to Promote a Business	Must include letterhead, business card, and flyer (Letterhead, Business Card and Flyer cannot be separately entered in any another category).	HP20008

Safety Poster	A poster designed to display a safety measure related to a specific workplace or classroom procedure. Size not to exceed 18"x24".	HP20009
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Publications

Event	Details	Event #
Bound Multiple Page Document	Instructional manual, memory book, course description, student handbook, etc. that is bound on one edge	HP20100
Yearbook Layout	Student produced single page spread covering school athletics, club organization, or campus event.	HP20101
Newsletter	Must include text wrapping images or graphics on a single sheet.	HP20102
Magazine Layout	Single Page must be submitted on 8.5 x 11 page. All photos and stories must be original work of the student.	HP20103

Marketing

Event	Details	Event #
Product Label	Example could be a soup can label. To avoid copyright issues, use an imaginary product.	HP20200
Product Packaging	Provide packaging for a retail product. Example - Electronic box, toy, or wrapper. To avoid copyright issues, use an imaginary product.	HP20201
Sticker Decal	Provide one final product sticker.	HP20202
Computer Image Transfer	Product Graphic Printing entries must include one printed product in order to judge quality along with content, composition and overall effect. Can Include TSA Club T-Shirt. Product must be in a maximum of 2 gallon Ziploc style clear bag with documentation.	HP20203
Sublimation	Product Graphic Printing entries must include one printed product in order to judge quality along with content, composition and overall effect. Can Include TSA Club T-Shirt. Product must be in a maximum of 2 gallon Ziploc style clear bag with documentation.	HP20204
Screen Print Communication	Should Advertise a Product, Place Or Upcoming Event. Can Include TSA Club T-Shirt (Commercial and Non-Commercial Screen Printing Allowed)	HP20205
Product Advertisement	Provide a printed advertisement for a retail product. Example - ad in a newspaper or magazine. Photos of real products may be used in the graphic design if cited correctly But all photos and graphics must be original student work.	HP20206

Section 2.1 Multimedia

Items in this section involve student created projects in which students used multimedia & animation technology to create 2D and 3D projects.

Documentation for these events should include:

- Texas TSA Documentation form
- Additional items as identified in the different sections.

Presentations

Entries must include two or more communication methods which include video, audio graphics, and animation. Use of AI in the creation of the presentation is prohibited. Use of AI will result in disqualification of the entry. Project Documentation must also include the following items:

- 1 page clearly describing the two different communication methods and why they were selected to enhance the presentation.

Event	Details	Event #
Computer Generated Presentation 1-10 slides		HP21000
Computer Generated Presentation 11-20 slides		HP21001

Audio Editing

Event	Details	Event #
Audio Editing - 30 sec max	Must supply original/finished copy	HP21100
Audio Editing - 2 min max	Must supply original/finished copy	HP21101

Video Editing

Student names may be present in credits

Project Documentation must also include the following items:

- A storyboard and/or script

Event	Details	Event #
Video Editing - Video Commercial 15 sec precisely		HP21200
Video Editing - Video Commercial 30 sec precisely		HP21201
Video Editing - Video Commercial 60 sec precisely		HP21202
Video Editing - Video with Special Effects 30 sec precisely		HP21203
Video Editing - Video with Special Effects 60 sec precisely		HP21204
Video Editing - Video Promo/Instructional/Demo - 3 min max		HP21206

Video Editing - Video Album - 3 min max		HP21207
Video Editing - Video Newscast - 2 min max		HP21208
Video Editing - Original Short Film - 3 min max		HP21209
Video Editing - Original Musical with Original Student Music - 3 min max		HP21210
Video Editing - Video footage only	This is editing of footage only, no sound, titles, or special effects	HP21211
Video Editing - Drone Videography 60 sec max		HP21212

Computer Generated Graphic

Project Documentation must also include the following items:

- Sketches or thumbnails detailing the development of the images

Event	Details	Event #
Computer Generated Graphic Art - Cover Art	This would include the cover for a book, album, or magazine. Single page only	HP21300
Computer Generated Graphic Art - Original Character Turn Around Sheet		HP21301
Computer Generated Graphic Art - Original Landscape, Abstract, or Still Life (B/W)		HP21302
Computer Generated Graphic Art - Original Landscape, Abstract, or Still Life (Color)		HP21303
Computer Generated Graphic Art - Original 3D Sci-Fi Image		HP21304
Computer Generated Graphic Art- Original 3D Other Than Sci-Fi Image		HP21305
Computer Generated Graphic Art - Desktop Wallpaper		HP21306

2D Animation

Student names may be present in credits

Project Documentation must also include the following items:

- A storyboard and/or script

Event	Details	Event #
2D Animation - Animatic 60 sec max	This is a line drawing animation - not filled in Should tell a story	HP21400
2D Animation - Story Based Animation 15 sec max		HP21401

2D Animation - Story Based Animation 30 sec max	Should tell a story	HP21402
2D Animation - Story Based Animation 60 sec max	Should tell a story	HP21403
2D Animation - Story Based Animation 3 min max	Should tell a story	HP21404
2D Animation - Commercial 30 sec precisely	An animation to advertise a product, business or event	HP21405
2D Animation - Introduction 60 sec max		HP21406
2D Animation - Stop Motion 30 sec max		HP21407

3D Animation

Student names may be present in credits
 Project Documentation must also include the following items:

- A storyboard and/or script

Event	Details	Event #
3D Animation - Story Based Animation 15 sec max	Should tell a story	HP21501
3D Animation - Story Based Animation 30 sec max	Should tell a story	HP21502
3D Animation - Story Based Animation 60 sec max	Should tell a story	HP21503
3D Animation - Story Based Animation 3 min max	Should tell a story	HP21504
3D Animated Commercial - 30 sec precisely	An animation to advertise a product, business or event.	HP21505
3D Animation - Introduction - 60 sec max		HP21506

Section 2.2 Computer Science

Items in this section involve student created projects in which students design, develop, and document original software applications. Projects may include desktop, web, or mobile applications.

- Definitions:
- Annotated Code - source code that includes extra descriptive notes that allows future developers to understand the purpose and logic of the code.
 - Flow Chart - A visual diagram that maps out the step by step logic, workflow, or algorithm of a program.

Documentation for these events must include:

- Texas TSA Document form
- Additional items as identified in the different sections.

Web Design

Project Documentation must also include the following items:

- A flowchart or road map detailing the development of the site

Event	Details	Event #
Webpage Design - Individual Webpage	Student name is permitted in this event.	HP22000
Webpage Design - School Related Webpage	School names, mascot and logos are permitted in this event.	HP22001
Webpage Design - Commercial Related Webpage	All graphics and pictures must be original work of the student.	HP22002

Video Game Design

Project Documentation must also include the following items:

- Annotated code of the game
- URL link to a video of the game being played not to exceed 1 minute in length

Event	Details	Event #
Video Game 2D	The game should be web based and not require running an executable file to run. Project will be submitted as a URL	HP22100
Video Game 3D	The game should be web based and not require running an executable file to run. Project will be submitted as a URL	HP22101

Programming

Project Documentation must also include the following items:

- Flowchart detailing the planning of the program
- Annotated code of the program

Event	Details	Event #
Program with text-based interface	A video (Max 2 minutes) demonstrating how the program operates will be submitted for the project	HP22200
Program with graphical user interface	A video (Max 2 minutes) demonstrating how the program operates will be submitted for the project	HP22201
Program made with a drag and drop language	Students must submit: 1) A URL link to a video of the program running not to exceed 1 minute in length. 2) The code in PDF for the program.	HP22202

Section 2.3 Photography

Items in this section involve students demonstrating mastery of camera operations, composition, lighting, and post-production photo editing techniques to create images that capture a moment in time. Students may use a traditional film camera, digital camera or phone camera.

Students must submit both the original (unaltered/raw) photo and the final edited photo.

Allowed Photo Edits:

- Post-click editing, color adjustments, white balance, contrast, exposure, cropping, sharpening, and stylistic edits (such as color-to-black-and-white conversion or filter adjustments) are permitted.
- Students are encouraged to use editing software to enhance lighting, focus, and artistic composition.

Photography Artificial Intelligence (AI) Policies:

Allowed AI Use: AI-assisted editing tools may only be used to remove or delete items from a photo (e.g., content-aware spot healing, object removal, background object deletion).

Prohibited AI Use: AI cannot be used to generate, add, or insert new photographic elements or subjects into an image. This includes, but is not limited to:

- Generative Fills (adding elements via text prompts or AI generation)
- Generative background replacement or sky replacement generated by AI
- Text-to-image or image-to-image AI extensions

Any entry utilizing AI to generate new visual elements or objects will be disqualified.

Originality & Copyright:

All photograph submissions must be captured entirely by the student entrant.

Copyrighted graphics, logos, or stock imagery cannot be composite-edited into the photo.

Documentation for these events must include:

- Texas TSA Document form
- Both the original (unaltered/raw) photo and the final edited photo

Advertising

Event	Details	Event #
Advertising - Fashion (Color)	Featuring clothing, other fashion items/accessories, makeup or styling in color.	HP23000
Advertising - Fashion (B/W)	Featuring clothing, other fashion items/accessories, makeup or styling in black and white.	HP23001
Advertising - Food	Photography featuring food for the purpose of advertisement. This is for the photograph only.	HP23002
Advertising - Product	Images that accurately and attractively represent products for commercial purposes	HP23003

Architecture

Event	Details	Event #
Architecture - Aerial/Drone	Photographs taken from an aircraft, with a drone, or other flying object, either by hand or remotely	HP23100
Architecture - Bridges	Images of bridges, arches, piers, or other similar structures or parts thereof	HP23101
Architecture - Buildings	Photographs featuring buildings and structures, or any aspects of a building's architectural features. This category is for residential and commercial buildings. Architectural elements such as doors, windows, steps, etc. are allowed to be the subject	HP23102
Architecture - Cityscapes	The physical aspects of a city or urban area.	HP23103
Architecture - Industrial	Buildings and structures serving commerce and/or industry such as a factory or warehouse. Other examples could include inside of a manufacturing plant, oil drilling, refineries, or production assembly.	HP23104
Architecture - Interior	Photographs of the interior spaces focusing on the use of colors, textures, patterns and layouts.	HP23105
Architecture - Street Art (Includes Graffiti)	Photography conducted for art or inquiry that features unmediated chance encounters and random incidents within public places, usually with the aim of capturing images at a decisive or poignant moment by careful framing and timing. Street Art can also include graffiti on buildings.	HP23106

Event

Event	Details	Event #
Event - Social Cause	Photographs covering events focused around social issues and causes. Examples could include cancer walks, political demonstrations, or charity ball.	HP23200
Event - Life Events	Images featuring people and activities capturing a life moment such as a wedding ceremony, birthday celebrations or traditions.	HP23201
Events - Live Entertainment	Photographs that could include music concerts or similar live events.	HP23202

Nature

Event	Details	Event #
Nature - Aerial/Drone	Photographs taken from an aircraft, with a drone, or other flying object, either by hand or remotely to capture an element of nature.	HP23300

Nature - Animal/Pet (Color)	Photographs featuring domesticated animals, including animals kept on a farm, in a zoo, or anywhere outside their natural habitat. This photo is in color.	HP23301
Nature - Animal/Pet (B/W)	Photographs featuring domesticated animals, including animals kept on a farm, in a zoo, or anywhere outside their natural habitat. This photo is in black and white.	HP23302
Nature - Astrophotography	Photographs of astronomical objects, celestial events, and areas of the night sky (landscapes with astronomical objects are included).	HP23303
Nature - Flowers	Photographs where the main subject is floral in any form.	HP23304
Nature - Landscape (Color)	Photographs that capture elements of nature and the natural features of land, sky and water. Photographs of artificial scenery, such as farm fields, orchards and gardens, can be entered here as well. This category is for color photographs.	HP23305
Nature - Landscape (B/W)	Photographs that capture elements of nature and the natural features of land, sky and water. Photographs of artificial scenery, such as farm fields, orchards and gardens, can be entered here as well. This category is for black and white photographs.	HP23306
Nature - Macro	Macro photography is extreme close-up photography, usually of very small subjects and living organisms like insects, in which the size of the subject in the photograph is greater than life-size.	HP23307
Nature - Seasons	Images with a focus on the natural seasons and their effect on nature. An example could be a field of fresh snow.	HP23308
Nature - Sunrise/Sunset	Photographs showing the rich colors and dramatic lighting of the sunrise or sunset.	HP23309
Nature - Trees	Photography focusing on the subject of trees and forestry.	HP23310
Nature - Wildlife	Photographs documenting animals and other wildlife in their natural habitat (NOTE: animals NOT in their natural habitat, such as farm animals or those kept in a zoo, should be entered in the "Animal/Pets" category).	HP23311

Panoramic

Event	Details	Event #
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Panoramic - Horizontal	A type of photography with elongated horizontal fields of view.	HP23400
Panoramic - Vertical	A type of photography with elongated vertical fields of view.	HP23401

People

Event	Details	Event #
People - Children	Photographs capturing the essence of children and youth in a spontaneous moment.	HP23500
People - Culture	A single image that tell a story about a people and their culture or traditions.	HP23501
People - Family	Photograph highlighting family and what it means to the photographer.	HP23502
People - Newborn/Baby	Photographs of newborns, babies, and/or toddlers.	HP23503
People - Portrait	Artistic images capturing the personality of a person or group of people in a staged setting.	HP23504
People - Self Portrait	Photographs representing the artist taken by the artist.	HP23505
People - Street Photography	Photographs that capture the essence of the urban lifestyle, random moments, real life, and chance encounters. These photographs capture candid moments on the streets of a city. People DO have to be present in the photograph.	HP23506

Photojournalism

Event	Details	Event #
Photojournalism - Single Photo	This category is for images usually meant to accompany text, illustrate a story, article, or an idea within the context of a publication, and can cover a wide range of subjects.	HP23600
Photojournalism - 2 or More Photos	This category is for images usually meant to accompany text, illustrate a story, article, or an idea within the context of a publication, and can cover a wide range of subjects.	HP23601
Photojournalism - Travel Collage	This category is for images usually meant to accompany text, illustrate a story, article, or an idea within the context of a publication, and can cover a wide range of subjects. Limited to one 8 1/2"x11" sheet.	HP23602

Photomanipulation

Event	Details	Event #
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Photomanipulation - Background Manipulation	Photograph edits applied only to the background of an image that does not include focus subject matter.	HP23700
Photomanipulation - Subject Manipulation	Photograph edits applied only to the focus subject matter while leaving the background unchanged.	HP23701

Sports

Event	Details	Event #
Sports - Extreme Sports	Photographs documenting sports and recreational activities perceived as involving a high degree of risk.	HP23800
Sports - Motor Sports	Images covering competitive sporting events that primarily involve the use of motorized vehicles. An example could be a car or boat race.	HP23801
Sports - Indoor Individual/Team Sports	A photograph featuring any sport in which opposing Individuals/teams compete indoors to win. Some examples could be a basketball game, gymnastics meet, or volleyball match.	HP23802
Sports - Outdoor Individual/Team Sports	A photograph featuring any sport in which opposing Individuals/teams compete outdoors to win. Some examples include football game, track meet, or a baseball game.	HP23803

Transportation

Event	Details	Event #
Transportation - Automobile	A photograph where the focus of the subject is a car, truck, motorcycle, bus, etc.	HP23900
Transportation - Railway	A photograph where the focus of the subject uses a rail system to travel a distance such as trains and trolleys.	HP23901
Transportation - Nautical	A photograph where the focus of the subject uses water as a means of travel such as a sailboat, cruise ship, tug boat, or cargo ship.	HP23902
Transportation - Aerospace	A photograph where the focus of the subject uses air for their method of travel like an airplane, helicopter, space shuttle or glider.	HP23903



26-27 HS Rulebook

High School Unique to Texas Projects

High School Unique to Texas Projects (UTE-Projects) are events that are unique to the state of Texas and can be competed at the regional and state level.

Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students **ONLY** have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Technical Design

These events are designed for students using traditional drafting and computer aided design techniques to create industry documents. All projects must include the required documentation and refer to the High School Event Guidelines for submission directions.

Entries that have multiple sheets **MUST** be bound on the left side of the sheets using staples. Unbound sets or sets bound with temporary methods such as paper clips will not be accepted. Maximum sheet size is Arch D (24" x 36").

Title blocks may contain only the following information:

- Student Initials
- Unique Student ID Number
- Category Number
- Title
- Description
- Scale

School logos are not allowed. Students may create their own logo to be used in the title block as long as it does not have any identifying information or reference to the school name.

All student entries must be made from a single unique native file. Each project must be unique in both the final product and any associated electronic file regardless of file type. The only exception is the use of common library parts such as the Content Center in AutoDesk.

Section 3.0 Engineering

Items in this section involve student created engineering projects in which students created projects using traditional drafting or modern computer aided design standards, practices, and methods.

Use of AI applications are prohibited. Use of AI will result in disqualification of entry.

Documentation for these events must include:

- Texas TSA Documentation form

Free Hand Sketching

Shading is Allowed. Shading can be graphite or color pencil only. Single sheet only.

Event	Details	Event #
Mechanical Engineering - Free Hand Sketch of a Single or Multiple Part Mechanical Device. Pen or Pencil Only.		HP30000
Aerospace Engineering - Free Hand Sketch of an Aerospace Device or Structure. Pen or Pencil Only.		HP30001
Electronic Engineering - Free Hand Sketch of an Electronic Device. Pen or Pencil Only.		HP30002
Civil Engineering - Free Hand Sketch of a Civil Structure. Pen or Pencil Only.		HP30003

Working Drawings

Working Drawings - drawings that are used to provide the technical details of a design. Drawings must include the information to recreate the design which could include but not limited to:

- Dimensions
- American National Standard Institute (ANSI) standards of symbols and conventions
- Title
- Scale
- Threading
- Materials
- Notes
- Components such as nuts, bolts and clips are to be included in the working drawings and count as one part regardless of how many are needed.

Working Drawing to include Front, Top, and Right Side Views. Duplicate views can be omitted or a Section View can be Used in its place.

Event	Details	Event #
Mechanical Engineering - Working Drawings of a Single or Multiple Parts. Pen or Pencil Only	Single Sheet Only	HP30100
Mechanical Engineering - Working Drawings of a Single or Multiple Parts with a Pictorial View. Pen or Pencil Only	Working Drawings will also include an Isometric or Oblique View (No Shading Allowed). Single Sheet Only.	HP30101
Mechanical Engineering - Working Drawings of a Single Part. [CADD]	Single Sheet Only	HP30102
Mechanical Engineering - Working Drawings of 2-5 Mechanical Parts. [CADD]	Number of sheets as needed.	HP30103
Mechanical Engineering - Working Drawings of 6-12 Mechanical Parts. [CADD]	Number of sheets as needed.	HP30104
Mechanical Engineering - Working Drawings of 13 or More Mechanical Parts. [CADD]	Number of sheets as needed.	HP30105
Mechanical Engineering - Working Drawings of a Single Part with a Pictorial View. [CADD]	Working Drawings will also include an Isometric or Oblique View (No Rendering Allowed). Single Sheet Only.	HP30106
Mechanical Engineering - Working Drawings of 2-5 Mechanical Parts with a Pictorial View. [CADD]	Working Drawings will also include an Isometric or Oblique View (No Rendering Allowed). Single Sheet Only.	HP30107
Mechanical Engineering - Working Drawings of 6-12 Mechanical Parts with a Pictorial View. [CADD]	Working Drawings will also include an Isometric or Oblique View (No Rendering Allowed). Number of Sheets as needed.	HP30108

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Mechanical Engineering - Working Drawings of 13 or More Mechanical Parts with a Pictorial View. [CADD]	Working Drawings will also include an Isometric or Oblique View (No Rendering Allowed). Number of Sheets as needed.	HP30109
Mechanical Engineering - Working Drawings of Pipe Fabrication (Fluid Transportation). [CADD]	Working Drawings to include Pipe Layout Plan, Fitting Identification, and Vertical Information. Number of sheets as needed.	HP30110
Mechanical Engineering - Working Drawings of a Transportation Device with a Pictorial View. [CADD]	Working Drawings will also include an Isometric or Oblique View (No Rendering Allowed). Number of Sheets as needed.	HP30111
Aerospace Engineering - Working Drawings of an Aerospace Device or Structure with a Pictorial View. [CADD]	Working Drawings will also include an Isometric or Oblique View (No Rendering Allowed). Number of Sheets as needed.	HP30112

Pictorial View

Pictorial Drawing - provides a 3D like image to help understand the shape of an object or to assist in interpreting a drawing. There are three types of pictorial drawings: isometric drawings, oblique drawings, and perspective drawings.

No Illustrating/Rendering Allowed.
Single Sheet Only

Event	Details	Event #
Mechanical Engineering - Pictorial View Only of a Single or Multiple Parts. Any Method Other Than Computer.		HP30200
Mechanical Engineering - Pictorial View Only of a Single Part. [CADD]		HP30201
Mechanical Engineering - Pictorial View Only of 2-5 Mechanical Parts. [CADD]		HP30202
Mechanical Engineering - Pictorial View Only of 6-12 Mechanical Parts. [CADD]		HP30203
Mechanical Engineering - Pictorial View Only of 13 or More Mechanical Parts. [CADD]		HP30204
Mechanical Engineering - Pictorial View of Pipe Fabrication (Fluid Transportation). [CADD]		HP30205
Mechanical Engineering - Pictorial View of a Transportation Device. [CADD]		HP30206

Aerospace Engineering - Pictorial View of an Aerospace Device or Structure. [CADD]	HP30207
Electronic Engineering - Pictorial View of an Electronic Device. [CADD]	HP30208
Civil Engineering - Pictorial View of a Civil Structure. [CADD]	HP30209

Presentation View

Presentation Drawing - the production of a drawing for the purpose of gaining support, such as at a presentation or to “sell” a product.
 Assembled view only.
 Must be Rendered/Illustrated
 Single Sheet Only

Event	Details	Event #
Mechanical Engineering - Presentation View Only of a Single or Multiple Parts. Any Method Other Than Computer.	Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is required. Single sheet only.	HP30300
Mechanical Engineering - Presentation View Only of a Single Part. [CADD]		HP30301
Mechanical Engineering - Presentation View Only of 2-5 Mechanical Parts. [CADD]		HP30302
Mechanical Engineering - Presentation View Only of 6-12 Mechanical Parts. [CADD]		HP30303
Mechanical Engineering - Presentation View Only of 13 or More Mechanical Parts. [CADD]		HP30304
Mechanical Engineering - Presentation View of a Transportation Device. [CADD]		HP30306
Aerospace Engineering - Presentation View of an Aerospace Device or Structure. [CADD]		HP30307
Electronic Engineering - Presentation View of an Electronic Device. [CADD]		HP30308
Civil Engineering - Presentation View of a Civil Structure. [CADD]		HP30309

Exploded Presentation View

Exploded Presentation Drawing showing multiple parts in an isometric or 3D view that show how the parts would fit together to form one working device. This is typically used in assembly instructions or as a means to order specific parts. A part list must be included on the sheet.

Event	Details	Event #
Mechanical Engineering - Exploded Presentation View Only of 2-5 Mechanical Parts. [CADD]		HP30400
Mechanical Engineering - Exploded Presentation View Only of 6-12 Mechanical Parts. [CADD]		HP30401
Mechanical Engineering - Exploded Presentation View Only of 13 or More Mechanical Parts. [CADD]		HP30402
Aerospace Engineering - Exploded Presentation View of an Aerospace Device or Structure. [CADD]		HP30403
Electronic Engineering - Exploded Presentation View of an Electronic Device. [CADD]		HP30404

Engineering Media

Engineering media uses rendering methods to create a realistic view of a part or machine. Animations show how different parts come together in assembly to create one working device.

Event	Details	Event #
Engineering Media - Original 3D Computer Image of a Mechanical Part or Parts		HP30500
Engineering Media - Animated Assembly or Mechanical Movement of Multiple Mechanical Parts - 60 sec max		HP30501
Engineering Media - Animated Transpiration Device - 60 sec max		HP30502
Engineering Media - Engineering Presentation Animation Multiple Parts - 3 min max	Reserved for students working with 3D apps, advanced modeling and animation software. Rendering is required.	HP30503

Section 3.1 Architecture

Items in this section involve student created architecture projects in which students created projects using traditional drafting or modern computer aided design standards, practices, and methods.

Use of AI applications are prohibited. Use of AI will result in disqualification of entry.

Documentation for these events must include:

- Texas TSA Documentation form

Free Hand Sketching

Event	Details	Event #
Free Hand Sketch of an Architectural Structure. Pen or Pencil Only.	This event is designated for hand sketching only. Traditional board drafting techniques such as but not limited to scales, straight edges, or templates are not permitted. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is allowed but not required. Single sheet only.	HP31000
Free Hand Sketch of Landscape. Pen or Pencil Only.	This event is designated for hand sketching only. Traditional board drafting techniques such as but not limited to scales, straight edges, or templates are not permitted. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is allowed but not required. Single sheet only.	HP31001
Perspective Drawing of an Architectural Subject. Pen or Pencil Only.	Any number of vanishing points are allowed. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is allowed but not required. Single sheet only.	HP31002
Perspective Drawing of a Landscape Subject . Pen or Pencil Only.	Any number of vanishing points are allowed. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is allowed but not required. Single sheet only.	HP31003

Construction Drawings

Construction Drawings - drawings that are used to provide the technical details of a design. Drawings must include the information to recreate the design which could include but not limited to:

- Dimensions
- American National Standard Institute (ANSI) standards of symbols and conventions
- Title
- Scale
- Threading
- Materials
- Notes

Constructions Drawings are to include but not limited to:

- Cover Sheet
- Site Plan
- Existing Floor Plan (Remodel Only)
- Demolition Plan (Remodel Only)
- Floor Plan(s)
- Elevations
- Roof Plan
- Reflected Ceiling Plan (Commercial Only)
- Electrical Drawings - Include at minimum Electrical Outlets, Light Switches, and Lighting.

Event	Details	Event #
Construction Drawings of a Tiny Home on a Trailer. Pen or Pencil Only.	Use traditional board drafting techniques to develop a set of construction drawings. No illustrating allowed.	HP31100
Construction Drawings of any Residential Structure. Pen or Pencil Only.	Use traditional board drafting techniques to develop a set of construction drawings. No illustrating allowed.	HP31101
Construction Drawings of any Commercial Structure. Pen or Pencil Only.	Use traditional board drafting techniques to develop a set of construction drawings. No illustrating allowed.	HP31102
Construction Drawings of a Tiny Home on a Trailer. [2D & 3D CADD]		HP31103
Construction Drawings of Residential Home under 2000 sq. ft HVAC [2D CADD]		HP31104
Construction Drawings of Residential Home under 2000 sq. ft HVAC [3D CADD]		HP31105
Construction Drawings of Residential Home over 2000 sq. ft HVAC [2D CADD]		HP31106

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Construction Drawings of Residential Home over 2000 sq. ft HVAC [3D CADD]	HP31107
Construction Drawings of Residential Multistory Single Family Home under 2000 sq. ft [2D CADD]	HP31108
Construction Drawings of Residential Multistory Single Family Home under 2000 sq. ft [3D CADD]	HP31109
Construction Drawings of Residential Multistory Single Family Home over 2000 sq. ft [2D CADD]	HP31110
Construction Drawings of Residential Multistory Single Family Home over 2000 sq. ft [3D CADD]	HP31111
Construction Drawings of Apartment, Condo, Townhouse, Duplex [2D CADD]	HP31112
Construction Drawings of Apartment, Condo, Townhouse, Duplex [3D CADD]	HP31113
Construction Drawings of a Commercial Structure-Retail [3D CADD]	HP31115
Construction Drawings of a Commercial Structure-Restaurant [2D CADD]	HP31116
Construction Drawings of a Commercial Structure-Restaurant [3D CADD]	HP31117
Construction Drawings of a Commercial Structure-Other [2D CADD]	HP31118
Construction Drawings of a Commercial Structure-Other [3D CADD]	HP31119
Construction Drawings of a Commercial Structure - Mixed Use [2D CADD]	HP31120
Construction Drawings of a Commercial Structure - Mixed Use [3D CADD]	HP31121

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Construction Drawings of a Recreational Facility/Public Structure [2D CADD]		HP31122
Construction Drawings of a Recreational Facility/Public Structure [3D CADD]		HP31123
Construction Drawings of a Residential Remodeling [2D CADD]		HP31124
Construction Drawings of a Residential Remodeling [3D CADD]		HP31125
Construction Drawings of Detailing of Architectural Elements [2D & 3D CADD]	Can Include but not limited to Walls, Windows, Doors, Stairs, Cabinetry, Foundations, and Full Building Sections.	HP31126
Construction Drawings of Architectural Landscape/Irrigation Plan. Any Method Other Than Computer.	Use traditional board drafting techniques to develop a set of construction drawings. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is allowed but not required. Number of sheets as needed.	HP31127

Presentation Drawings

Presentation Drawings are single sheet documents that are used typically for sales. Examples include sales flyers a home builder would hand out of available floor plans in a subdivision, available rental space of a building or warehouse, and presentation to a client.

Residential floor plan must include but not limited to:

- Room Names
- Room Sizes
- Important features but not full dimensions

Commercial floor plans must include but not limited to:

- Area Names
- Area Sizes
- Area Square Footages
- Important features

Exterior views can be rendered, illustrated or line views.

Single Sheet Only

Event	Details	Event #
Presentation Drawing - Any Method Other Than Computer.	Residential-Exterior View & Floor Plan ONLY	HP31200
Presentation Drawing [2D CADD]	Residential-Exterior Front Elevation View and Floor Plan ONLY.	HP31201
Presentation Drawing [3D CADD]	Residential-Exterior View & Floor Plan ONLY.	HP31202
Presentation Drawing - Commercial/Public Structure - Any Method Other Than Computer.	Residential-Exterior View & Floor Plan ONLY.	HP31203

Presentation Drawing - Commercial/Public Structure [2D CADD]	Commercial-Exterior Front Elevation View and Floor Plan ONLY.	HP31204
Presentation Drawing - Commercial/Public Structure [3D CADD]	Residential-Exterior View & Floor Plan ONLY.	HP31205

Architectural Media

Architectural Media uses rendering methods to create realistic views of a structure or landscaped area. Animations (Walkthrough and Flythrough) show how navigating a structure or site would look.

Event	Details	Event #
Architectural Media - Computer Generated Original 3D Image - Landscape	Structures can be included but are not the focus of the image.	HP31300
Architectural Media - Computer Generated Original 3D Image - Architectural Structure	Landscaping can be included but is not the focus of the image.	HP31301
Architectural Media - Architectural Walkthrough - 90 sec max	Camera height between 4'-7' above ground level.	HP31302
Architectural Media - Architectural Flythrough - 90 sec max	Camera height at least 20' above ground level.	HP31303
Architectural Media - Landscape Walkthrough - 90 sec max	Camera height between 4'-7' above ground level.	HP31304

Interior Design

Event	Details	Event #
Residential Interior Design Material Sample Board	Design boards should include but not limited to samples for all finishes, color coordination, sample furniture and other import design elements. Floor plans should be included showing finishes, furniture layout, and room names. All elements should be visible on a single side of the design board.	HP31400
Commercial Interior Design Material Sample Board	Design boards should include but not limited to samples for all finishes, color coordination, sample furniture and other import design elements. Floor plans should be included showing finishes, furniture layout, and room names. All elements should be visible on a single side of the design board.	HP31401
Residential Illustrated Perspective Interior View. Any Method Other Than Computer.	Interior view focusing on furniture and finishes. Perspective can be either Single Point or 2 Point perspective. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is required. Single Sheet not to exceed 18"x24".	HP31402

Commercial Illustrated Perspective Interior View. Any Method Other Than Computer.	Interior view focusing on furniture and finishes. Perspective can be either Single Point or 2 Point perspective. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is	HP31403
Residential Illustrated Perspective Interior View.[CADD]	Interior view focusing on furniture and finishes. Perspective can be either a Single Point or 2 Point perspective. Rendering is required. Single Sheet not to exceed 18"x24".	HP31404
Commercial Illustrated Perspective Interior View.[CADD]	Interior view focusing on furniture and finishes. Perspective can be either a Single Point or 2 Point perspective. Rendering is required. Single Sheet not to exceed 18"x24".	HP31405

Section 3.2 Models

Items in this section involve projects in which students created and designed structures, models, used commercial kits, or highlighted the design process.

Use of AI applications are prohibited. Use of AI will result in disqualification of entry.

The base of a model cannot exceed 24"x36".

Document for these events must include:

- Texas TSA Documentation form
- The floor plan - not to exceed 24"x36"

Finish Models

Finish Model - a scale model that incorporates the materials, design details, topography and landscaping to create a realistic version.

Event	Details	Event #
Finish Model of a Residential Single Family Home		HP32000
Finish Model of a Residential Multifamily Home (Apartment, Condo, Townhouse, or Duplex)		HP32001
Finish Model of a Residential Structure not listed		HP32002
Finish Model of a Master Plan Development		HP32003
Finish Model of a Commercial Building		HP32004
Finish Model of a Public/Recreational Facility		HP32005
Finish Model of a Civil Structure		HP32006
Finish Model of a Space Structure		HP32007

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Structural Models

Structural Model - a scale model that represents the load-bearing elements of a structure or building and is also used to investigate how the structure will perform its various conditions.

Event	Details	Event #
Structural Model of a Single Family or Multifamily Residential Home		HP32100

Study Models

Study Model - a scale model that is minimal in detail for the purposes of visualization design ideas and concepts during the design process. The model is to include structure and topography only. Material details and landscape are not allowed.

Event	Details	Event #
Study Model of a Single Family or Multifamily Residential Home		HP32200
Study Model of a Commercial Building		HP32201

Kits

Project Documentation must also include the following items:

Photo documentation of kit assembly

Event	Details	Event #
Kits - Woods		HP32300
Kits - Metals		HP32301
Kits - Electrical/Electronics		HP32302
Kits - Other		HP32303



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Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students ONLY have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Applied Technical Science

These events are designed for students learning about the practical application of science and technology. All projects must include the required documentation and refer to the High School Event Guidelines for submission directions.

Section 4.0 Displays and Portfolios

Items in this section involve projects displaying and explaining the information a student a student has researched about the topics. The project should be suitable to be used as a teaching aide about the subject.

Use of AI applications are prohibited. The displays footprint will not exceed 24"x36".

Use of AI will result in disqualification of entry.

Documentation for these events must include:

- Texas TSA Documentation form

Aerodynamics

Event

Details

Event #

Display of the Principles or Mechanics of Flight	HP40000
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Biotechnical

Event	Details	Event #
Portfolio of Biotech Health		HP40100
Display of Biotechnical Research or Applications		HP40101

Construction & Material Science

Event	Details	Event #
Display of Construction Products, Processes or Techniques		HP40200
Display of a Construction Structure		HP40201
Display Illustrating the Differences of 2 or More Types of Structures		HP40202
Display of Materials Testing		HP40203

Electronics

Event	Details	Event #
Display of Electrical Energy Storage Device		HP40300
Display of Electronic Communication System or Device		HP40301
Display of Properties of Electrical Components, Semi-Conductor or Non Semiconductor		HP40302
Display of Robotic Applications		HP40303

Energy and Power

Event	Details	Event #
Portfolio of a Comparison Study of Power Efficiency	Based on Test Results of Electrical Usage of at Least 5 Different Items	HP40400
Display of Solar Energy		HP40401
Display of Electrical Energy and/or Power Generation		HP40402
Display of Hydraulics or Pneumatics		HP40403
Display of Fuel Resource, Exploration, Extraction, Processing & Utilization		HP40404
Display of the Generation of Electrical Energy from an Energy Source	Fossil, Nuclear, etc.	HP40405

Display of a Power Grid	Conversion and Transmission of Energy Sources to Electrical Power	HP40406
Display of External/Internal Combustion Engines Operation and Utilization		HP40407

Manufacturing

Event	Details	Event #
Display of an Organization Chart for a Manufacturing Company Including Job Descriptions		HP40501
Display of 5 or More Production Career Opportunities		HP40502

Multidisciplinary

Event	Details	Event #
Display of Cross-Curricular Learning Activities for 2 or More School Disciplines		HP40600

Transportation

Event	Details	Event #
Display of a Career in the Transportation Field		HP40700
Display of a Transportation Method	Highway, Railway, Air, Water, etc.	HP40701

Section 4.1 Models and Prototypes

Items in this section involve projects in which students create a model or prototype.

Definitions:

Model - a visual or conceptual representation used to show how something specifically works, typically done to scale

Prototype - working, functional project built to specifically test performance and usability.

The displays need to have a footprint not exceeding 24"x36".

Documentation for these events should include:

- Texas TSA Documentation form
- Bill of Materials Form
- CAD drawings and/or Schematics of designs

Aerodynamics

Event	Details	Event #
Airfoil Testing for Automobiles, Airplanes, or Rockets		HP41000

Electronics

No kits allowed

Event	Details	Event #
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Residential Wiring Mockup	HP41100
Prototype of Alarm Circuits	HP41101
Prototype of an Audio System or Communication Device	HP41102
Prototype of Electronic Games/Toys (non-kit)	HP41103
Prototype of Logic Circuits	HP41104
Prototype of an Electronic Device	HP41105

Robotics

Event	Details	Event #
Robotic Programming any Computer Based Program	C++, Java, etc.	HP41200
Robot Using 2 Sensors & Only 1 Controlling Unit		HP41201
Robot Using 3 or More Sensors & Only 1 Controlling Unit		HP41202
Robot Contest Display	This is display to showcase a robot that competed at a robotics competition during the current school year. Example competitions would be FIRST, BEST, or RECF. The display should showcase both the design process and performance at competition. Engineering Notebook must be a part of the display. Due to size limitations, the robot can be represented via photos on the display.	HP41203



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Middle School School Unique to Texas Projects

Middle School Unique to Texas Projects (UTE-Projects) are events that are unique to the state of Texas and can be competed at the regional and state level.

Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students ONLY have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Manufacturing

These events are designed for students manufacturing unique work using a variety of modern techniques. All projects must include the required documentation and refer to the Middle School Event Guidelines for submission directions.

Section 1.0 CNC/CAM and 3D Printing

Computer Numerical Control (CNC), Computer Aided Manufacturing (CAM), or 3D Printing devices are used by students to create project entries in this section. Any projects in which CNC mills, lathes, routers, laser engravers, 3D Printers, or similar devices were not used to produce all major components should not be entered in this category.

Students are responsible for the design, material selection, and any assembly necessary to complete the project. Components such as hardware can be purchased but must be included in the documentation form.

Documentation for these events must include:

- The Texas TSA Documentation form
- The Bill of materials form
- The CAD drawings used to create the projects. May include as sheets as needed but sheets should not exceed 11" x 17".

Mill/Router/Lathe

Event	Event #
CNC/CAM Mill/Router/Lathe - Wood Single Piece	MP10000
CNC/CAM Mill/Router/Lathe - Wood 2 or More Parts	MP10001
CNC/CAM Mill/Router/Lathe - Wood a Pen, a Pencil or a Set	MP10002
CNC/CAM Mill/Router/Lathe - Any Material Other Than Wood 2 or More Parts	MP10004

Laser Engraver

Event	Event #
CNC/CAM Laser Engraver - Wood Single Piece	MP10100
CNC/CAM Laser Engraver - Wood 2 or More Parts	MP10101
CNC/CAM Laser Engraver - Any Material Other Than Wood Single Piece	MP10102
CNC/CAM Laser Engraver - Any Material Other Than Wood 2 or More Parts	MP10103

Plasma Cutter

Event	Event #
CNC/CAM Plasma Cutter - Metal Single Piece	MP10200

Other CNC/CAM

Event	Event #
CNC/CAM Other - Embroidery	MP10300

3D Printing

Event	Event #
CNC/CAM 3D Printer/Rapid Prototype - Engineering Single Part	MP10400
CNC/CAM 3D Printer/Rapid Prototype - Architectural Single Part	MP10401
CNC/CAM 3D Printer/Rapid Prototype - Biomedical Single Part	MP10402
CNC/CAM 3D Printer/Rapid Prototype - Any Other Subject Single Part	MP10403
CNC/CAM 3D Printer/Rapid Prototype - Engineering 2-5 Parts	MP10404

CNC/CAM 3D Printer/Rapid Prototype - Engineering 6 or More Parts	MP10405
CNC/CAM 3D Printer/Rapid Prototype - All Other Subjects 2-5 parts	MP10406
CNC/CAM 3D Printer/Rapid Prototype - All Other Subjects 6 or more parts	MP10407

Section 1.1 Wood

Items in this section involve student created projects in which students used traditional and modern woodworking tools, methods, and techniques to create projects.

Projects may contain minimal use of CNC mills, lathes, computer-controlled lasers, etc. Projects that used CNC mills, lathes, computer-controlled lasers, etc. for more than 80% of fabrication of the total project should not be entered in this category. Students are responsible for the design, material selection, and any assembly necessary to complete the project.

Purchased materials such as glass, mirrors, and hardware must be listed in documentation and do not count as an additional construction material.

Documentation for these events must include:

- Texas TSA Documentation form
- Bill of Materials Form

Manual Turning

Projects in this category are crafted using traditional lathe and turning tools. Example projects include but not limited to lamps, candlesticks, walking canes, and bowls.

Event	Event #
Manufacturing Wood Manually Turned Pen, a Pencil or a Set	MP11000
Manufacturing Wood Manually Turned Single or Multiple Parts Any Length	MP11001

Indoor

Projects in this category are entirely made of wood for the primary use to be indoors. Example projects include but not limited to bookshelves, tables, dressers, display cabinets, and bed headboards.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event	Event #
Manufacturing Wood Indoor No Side Dimension to Exceed 6 x 36 x 36 inches	MP11100
Manufacturing Wood Indoor No Side Dimension to Exceed 24 x 24 x 96 inches	MP11101
Manufacturing Wood Indoor No Side Dimension to Exceed 36 x 36 x 96 inches	MP11102
Manufacturing Wood Indoor No Side Dimension to Exceed 48 x 48 x 96 inches	MP11103
Manufacturing Wood Indoor Exceeds Other Sizes 49+ x 49+ x 49+ inches	MP11104

Outdoor

Projects in this category are entirely made of wood for the primary use to be outdoors. Example projects include but not limited to Projects in this category are entirely made of wood for the primary use to be outdoors. Example projects include but not limited to picnic tables, outdoor furniture, tiki stands, and swings.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event	Event #
Manufacturing Wood Outdoor No Side Dimension to Exceed 6 x 36 x 36 inches	MP11200
Manufacturing Wood Outdoor No Side Dimension to Exceed 24 x 24 x 96 inches	MP11201
Manufacturing Wood Outdoor No Side Dimension to Exceed 36 x 36 x 96 inches	MP11202
Manufacturing Wood Outdoor No Side Dimension to Exceed 48 x 48 x 96 inches	MP11203
Manufacturing Wood Outdoor Exceeds 49+ x 49+ x 49+ inches	MP11204

Section 1.2 Metal

Items in this section involve student created projects in which students used traditional and modern metal trade tools, methods, and techniques to create projects. Projects may contain minimal use of CNC mills, lathes, computer-controlled lasers, plasma cutters, etc. Projects that used CNC mills, lathes, computer-controlled lasers, plasma cutters, etc. for more than 80% of fabrication of the total project should not be entered in this category. Students are responsible for the design, material selection, and any assembly necessary to complete the project. Purchased materials such as glass, mirrors, and hardware must be listed in documentation and do not count as an additional construction material.

Documentation for these events must include:

- Texas TSA Documentation form
- Bill of Materials Form

Decorative

Projects in this category are entirely made of metal for the primary use to be for decoration. Example projects include but not limited to signs, yard art, table inlays, and name plates.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event	Event #
Manufacturing Metals Decorative Not to Exceed 6 x 36 x 36 inches	MP12000
Manufacturing Metals Decorative Not to Exceed 24 x 24 x 120 inches	MP12001
Manufacturing Metals Decorative Not to Exceed 36 x 36 x 120 inches	MP12002
Manufacturing Metals Decorative Not to Exceed 48 x 48 x 120 inches	MP12003

Functional

Projects in this category are entirely made of metal for the primary use to perform a function. Example projects include but not limited to bumpers, fire pits, grills/smokers, and farm equipment.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event

Manufacturing Metals Functional Not to Exceed 72 x 72 x 120 inches

Event

MP12105

Section 1.3 Other Materials

Projects in this section are entirely made of one material other than wood or metal. Example projects include but not limited to RC car body, walking cane, artistic statue, PVC catapult, and drinking glass.

Documentation for these events must include:

- Texas TSA Documentation form
- Bill of Materials Form

PVC

Event

Other Materials PVC Not to Exceed 36 x 36 x 36 inches

Event

MP13001

Material Turning

Event

Other Materials Manual Turned Any Material Other Than Wood Pen, a Pencil, or a Set

Event

MP13100

Other Materials

Event

Other Materials Injection Molding

Event

MP13200

Other Materials Casting

MP13202

Other Materials Reinforced Resins

MP13203

Other Materials Composite

MP13205

Other Materials Fabric

MP13207

Other Materials Leather

MP13209

Other Materials Paper

MP13210

Other Materials Combination of 2 or More Materials (No Wood or Metal)

MP13211

Wood/Metal Mixed Materials

Combination Material projects in this section are made of 2 or more materials including wood and metal. Example projects include but not limited to wood and resin table tops, wood and metal furniture, and stained glass and metal yard art.

All projects must be removed from trailers before entering the Exhibit Hall. No trailers will be allowed in the Exhibit Hall. Loading and unloading is the responsibility of the Chapter. No forklifts or equipment will be provided by Texas TSA or Fort Worth Convention Center.

Event

Wood/Metal Mixed Materials Not to Exceed 6 x 36 x 36 inches
Wood/Metal Mixed Materials Not to Exceed 24 x 24 x 96 inches
Wood/Metal Mixed Materials Not to Exceed 36 x 36 x 96 inches

Event

MP13300
MP13301
MP13302

Restoration

Restoration items that were originally commercially manufactured and have been restored to their original state.

Project Documentation must also include all of the following additional items:

- A work history must accompany the entry showing the condition of the item before the restoration.
- All parts not reconditioned by the student must be identified.
- Photos documenting the restoration process

Event

Restoration Furniture
Restoration Mechanical/Machine Devices
Restoration Toys

Event

MP13400
MP13401
MP13403

Recycled

Recycled projects must be made out of a minimum of 50% recycled materials. A recycled material is defined by using a component or material in a way that it was not originally designed for. An example would be using bathroom tissue rolls to create the inner structure of a foot stool, using license plates to create the outline of Texas, or using painted plastic spoons to create a decorative mirror.

Project Documentation must also include all of the following additional items:

- A work history showing the recycled item before construction.
- Photos documenting the construction process

Event

Recycled Materials Wood
Recycled Materials Plastic
Recycled Materials Combination of 2 or More Recycled Materials

Event

MP13500
MP13503
MP13504



26-27 MS Rulebook

Middle School School Unique to Texas Projects

Middle School Unique to Texas Projects (UTE-Projects) are events that are unique to the state of Texas and can be competed at the regional and state level.

Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students ONLY have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Graphic Arts, Multimedia, Computer Science and Photography

These events are designed for students using technology to produce graphics, photos, and programs to be used in a variety of ways. All projects must include the required documentation and refer to the Middle School Event Guidelines for submission directions.

Section 2.0 Graphic Design

Items in this section involve student created projects in which students design elements (such as typography and images) to convey information or create an effect. Projects are limited to 8 ½" x 11" unless otherwise stated in the category details.

For project submission it is recommended that projects are placed in the same clear front portfolio cover as the documentation. For projects such a t-shirt, place the project and portfolio in a 1 gallon ziplock bag.

Copyright names and images cannot be used. All informational content, graphics and pictures must be original work of the student. Use of AI applications are prohibited. Use of Copyrighted information or AI will result in disqualification of entry.

Documentation for these events must include:

- Texas TSA Documentation form
- Additional items as identified in the different sections.

Business Documents

Event	Details	Event #
Business Cards/Name Tags, Etc.	Provide (2) different design options on 8.5" x 11" paper. Choose (1) Final Design and provide a cardstock version not to exceed 3.5"x3.5". Standard business cards are 3.5"x2".	MP20000
Certificate	Certificate must include Type of Certificate, Reason for Certification, Certificate Recipient, and Certificate Presenter.	MP20001
Spreadsheet Minimum Of 5 Columns and 5 Rows	Must Have at Least 2 Formulas Submission requires a video demonstrating how the spreadsheet works - max of 5 minutes	MP20003
A Word-Processing Document, Any Subject - No Graphics		MP20004
A Word-Processing Document - With Graphics		MP20005
Thematic Poster 12x18 max size	Must follow the yearly conference theme set by Texas TSA	MP20007
Safety Poster	A poster designed to display a safety measure related to a specific workplace or classroom procedure. Size not to exceed 18"x24".	MP20008

Publications

Event	Details	Event #
Flyer Single Sheet	Provide a printed informational sheet for an event. Example - promotional handout for a benefit concert, CTSO fundraiser, car show, etc.	MP20100
Product Specification Sheets		MP20101

Owners/Operators Manual		MP20102
Folded Handout 1-2 Printed Panels	Max paper size is 8.5 x 11. May include: invitations, greeting cards, menus, etc.	MP20103
Folded Handout 3-4 Printed Panels	Max paper size is 8.5 x 11. May include: invitations, greeting cards, menus, etc.	MP20104
Folded Handout 5 Or More Printed Panels	Max paper size is 8.5 x 11. May include: invitations, greeting cards, menus, etc.	MP20105
Newsletter	Must Include: Letterhead or Masthead, Graphics and Have at Least Two Columns	MP20106

Marketing

Event	Details	Event #
Screen Print - One Color - Hand Cut	Product Graphic Printing entries must include one printed product in order to judge quality along with content, composition and overall effect. Can Include TSA Club T-Shirt. Product must be in a maximum of 2 gallon Ziploc style clear bag with documentation.	MP20200
Computer Generated Design Transfer - Multi-Color	Product Graphic Printing entries must include one printed product in order to judge quality along with content, composition and overall effect. Can Include TSA Club T-Shirt. Product must be in a maximum of 2 gallon Ziploc style clear bag with documentation.	MP20207
Sticker Decal	Provide one final product sticker.	MP20209
Product Label	Example could be a soup can label. To avoid copyright issues, use an imaginary product.	MP20210
Computer Image Transfer	Fabric, Mug, Etc.	MP20211
Screen Print Communication - One Color On Paper, Fabric, or Container.	Should Advertise a Product, Place or Upcoming Event. Printing entries must include one printed product in order to judge quality along with content, composition and overall effect. Can Include TSA Club T-Shirt. Product must be in a maximum of 2 gallon Ziploc style clear bag with documentation. (Commercial Screen Printing Only)	MP20213

Section 2.1 Multimedia

Items in this section involve student created projects in which students used multimedia & animation technology to create 2D and 3D projects.

Documentation for these events should include:

- Texas TSA Documentation form
- Additional items as identified in the different sections.

Presentations

Entries must include two or more communication methods which include video, audio graphics, and animation. Use of AI in the creation of the presentation is prohibited. Use of AI will result in disqualification of the entry. Project Documentation must also include the following items:

- 1 page clearly describing the two different communication methods and why they were selected to enhance the presentation.

Event	Details	Event #
Computer Based Multimedia Entries With Academic Themes		MP21000
Computer Based Multimedia Entries With Technology Themes		MP21001
Slide Series - Max Of 20 Slides	Arranged to Tell a Story or Explain a Process	MP21002

Video Editing

Project Documentation must also include the following items:

- A storyboard and/or script

Event	Details	Event #
Still Capture - 1 Frame Capture From Video		MP21200
Video Capture - Multiple Frame		MP21202

Computer Generated Graphic

Project Documentation must also include the following items:

- Sketches or thumbnails detailing the development of the images

Event	Details	Event #
Student Original - Computer Graphics - B/W		MP21300
Student Original - Computer Graphics - Color		MP21301
Student Edited - Computer Graphics - Color	Must Show Original	MP21303

2D Animation

Project Documentation must also include the following items:

- A storyboard and/or script

Event	Details	Event #
2D Computer Animation Subject: Any Area - 60 sec max	Should tell a story.	MP21400
2D Computer Animation Subject: Safety - 60 sec max	Animation focused on classroom, lab, or jobsite safety procedures.	MP21401

Section 2.2 Computer Science

Items in this section involve student created projects in which students design, develop, and document original software applications. Projects may include desktop, web, or mobile applications.

Documentation for these events must include:

- Texas TSA Document form
- Additional items as identified in the different sections.

Web Design

Project Documentation must also include the following items:

- A flowchart or road map detailing the development of the site

Event	Details	Event #
Webpage Design - Individual Webpage	Student name is permitted in this event.	MP22000
Webpage Design - Commercial Related Webpage	All graphics and pictures must be original work of the student.	MP22002

Video Game Design

Project Documentation must also include the following items:

- Annotated code of the game
- URL link to a video of the game being played not to exceed 1 minute in length

Event	Details	Event #
Video Game 2D	The game should be web based and not require running an executable file to run. Project will be submitted as a URL	MP22100
Video Game 3D	The game should be web based and not require running an executable file to run. Project will be submitted as a URL	MP22101

Programming

Project Documentation must also include the following items:

- Flowchart detailing the planning of the program
- Annotated code of the program

Event	Details	Event #
Program with text-based interface	A video (Max 2 minutes) demonstrating how the program operates will be submitted for the project	MP22200
Program made with a drag and drop language	A video (Max 2 minutes) demonstrating how the program operates will be submitted for the project	MP22202

Section 2.3 Photography

Items in this section involve students demonstrating mastery of camera operations, composition, lighting, and post-production photo editing techniques to create images that capture a moment in time. Students may use a traditional film camera, digital camera or phone camera.

Students must submit both the original (unaltered/raw) photo and the final edited photo.

Allowed Photo Edits:

- Post-click editing, color adjustments, white balance, contrast, exposure, cropping, sharpening, and stylistic edits (such as color-to-black-and-white conversion or filter adjustments) are permitted.
- Students are encouraged to use editing software to enhance lighting, focus, and artistic composition.

Photography Artificial Intelligence (AI) Policies:

Allowed AI Use: AI-assisted editing tools may only be used to remove or delete items from a photo (e.g., content-aware spot healing, object removal, background object deletion).

Prohibited AI Use: AI cannot be used to generate, add, or insert new photographic elements or subjects into an image. This includes, but is not limited to:

- Generative Fills (adding elements via text prompts or AI generation)
- Generative background replacement or sky replacement generated by AI
- Text-to-image or image-to-image AI extensions

Any entry utilizing AI to generate new visual elements or objects will be disqualified.

Originality & Copyright:

All photograph submissions must be captured entirely by the student entrant.

Copyrighted graphics, logos, or stock imagery cannot be composite-edited into the photo.

Documentation for these events must include:

- Texas TSA Document form
- Both the original (unaltered/raw) photo and the final edited photo

Advertising

Event	Details	Event #
Advertising - Fashion (Color)	Featuring clothing, other fashion items/accessories, makeup or styling in color.	MP23000
Advertising - Fashion (B/W)	Featuring clothing, other fashion items/accessories, makeup or styling in black and white.	MP23001
Advertising - Food	Photography featuring food for the purpose of advertisement. This is for the photograph only.	MP23002
Advertising - Product	Images that accurately and attractively represent products for commercial purposes.	MP23003

Architecture

Event	Details	Event #
Architecture - Aerial/Drone	Photographs taken from an aircraft, with a drone, or other flying object, either by hand or remotely.	MP23100
Architecture - Bridges	Images of bridges, arches, piers, or other similar structures or parts thereof.	MP23101
Architecture - Buildings	Photographs featuring buildings and structures, or any aspects of a building's architectural features. This category is for residential and commercial buildings. Architectural elements such as doors, windows, steps, etc. are allowed to be the subject	MP23102
Architecture - Cityscapes	The physical aspects of a city or urban area.	MP23103
Architecture - Industrial	Buildings and structures serving commerce and/or industry such as a factory or warehouse. Other examples could include inside of a manufacturing plant, oil drilling, refineries, or production assembly.	MP23104
Architecture - Interior	Photographs of the interior spaces focusing on the use of colors, textures, patterns and layouts.	MP23105
Architecture - Street Art (Includes Graffiti)	Photography conducted for art or inquiry that features unmediated chance encounters and random incidents within public places, usually with the aim of capturing images at a decisive or poignant moment by careful	MP23106

Event

Event	Details	Event #
Event - Social Cause	Photographs covering events focused around social issues and causes. Examples could include cancer walks, political demonstrations, or charity ball.	MP23200
Event - Life Events	Images featuring people and activities capturing a life moment such as a wedding ceremony, birthday celebrations or traditions.	MP23201
Events - Live Entertainment	Photographs that could include music concerts or similar live events.	MP23202

Nature

Event	Details	Event #
Nature - Aerial/Drone	Photographs taken from an aircraft, with a drone, or other flying object, either by hand or remotely to capture an element of nature.	MP23300

Nature - Animal/Pet (Color)	Photographs featuring domesticated animals, including animals kept on a farm, in a zoo, or anywhere outside their natural habitat. This photo is in color.	MP23301
Nature - Animal/Pet (B/W)	Photographs featuring domesticated animals, including animals kept on a farm, in a zoo, or anywhere outside their natural habitat. This photo is in black and white.	MP23302
Nature - Astrophotography	Photographs of astronomical objects, celestial events, and areas of the night sky (landscapes with astronomical objects are included).	MP23303
Nature - Flowers	Photographs where the main subject is floral in any form.	MP23304
Nature - Landscape (Color)	Photographs that capture elements of nature and the natural features of land, sky and water. Photographs of artificial scenery, such as farm fields, orchards and gardens, can be entered here as well. This category is for color photographs.	MP23305
Nature - Landscape (B/W)	Photographs that capture elements of nature and the natural features of land, sky and water. Photographs of artificial scenery, such as farm fields, orchards and gardens, can be entered here as well. This category is for black and white photographs.	MP23306
Nature - Macro	Macro photography is extreme close-up photography, usually of very small subjects and living organisms like insects, in which the size of the subject in the photograph is greater than life-size.	MP23307
Nature - Seasons	Images with a focus on the natural seasons and their effect on nature. An example could be a field of fresh snow.	MP23308
Nature - Sunrise/Sunset	Photographs showing the rich colors and dramatic lighting of the sunrise or sunset.	MP23309
Nature - Trees	Photography focusing on the subject of trees and forestry.	MP23310
Nature - Wildlife	Photographs documenting animals and other wildlife in their natural habitat (NOTE: animals NOT in their natural habitat, such as farm animals or those kept in a zoo, should be entered in the "Animal/Pets" category).	MP23311

Panoramic

Event	Details	Event #
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Panoramic - Horizontal	A type of photography with elongated horizontal fields of view.	MP23400
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People

Event	Details	Event #
People - Children	Photographs capturing the essence of children and youth in a spontaneous moment.	MP23500
People - Culture	A single image that tell a story about a people and their culture or traditions.	MP23501
People - Family	Photograph highlighting family and what it means to the photographer.	MP23502
People - Newborn/Baby	Photographs of newborns, babies, and/or toddlers.	MP23503
People - Portrait	Artistic images capturing the personality of a person or group of people in a staged setting.	MP23504
People - Self Portrait	Photographs representing the artist taken by the artist.	MP23505
People - Street Photography	Photographs that capture the essence of the urban lifestyle, random moments, real life, and chance encounters. These photographs capture candid moments on the streets of a city. People DO have to be present in the photograph	MP23506

Photojournalism

Event	Details	Event #
Photojournalism - Single Photo	This category is for images usually meant to accompany text, illustrate a story, article, or an idea within the context of a publication, and can cover a wide range of subjects.	MP23600
Photojournalism - 2 or More Photos	This category is for images usually meant to accompany text, illustrate a story, article, or an idea within the context of a publication, and can cover a wide range of subjects.	MP23601
Photojournalism - Travel Collage	This category is for images usually meant to accompany text, illustrate a story, article, or an idea within the context of a publication, and can cover a wide range of subjects. Limited to one 8 1/2"x11" sheet.	MP23602

Photomanipulation

Event	Details	Event #
Photomanipulation - Background Manipulation	Photograph affects applied only to the background of an image that does not include focus subject matter.	MP23700

Sports

Event	Details	Event #
Sports - Extreme Sports	Photographs documenting sports and recreational activities perceived as involving a high degree of risk.	MP23800
Sports - Motor Sports	Images covering competitive sporting events that primarily involve the use of motorized vehicles. An example could be a car or boat race.	MP23801
Sports - Indoor Individual/Team Sports	A photograph featuring any sport in which opposing Individuals/teams compete indoors to win. Some examples could be a basketball game, gymnastics meet, or volleyball match.	MP23802
Sports - Outdoor Individual/Team Sports	A photograph featuring any sport in which opposing Individuals/teams compete outdoors to win. Some examples include football game, track meet, or a baseball game.	MP23803

Transportation

Event	Details	Event #
Transportation - Automobile	A photograph where the focus of the subject is a car, truck, motorcycle, bus, etc.	MP23900
Transportation - Railway	A photograph where the focus of the subject uses a rail system to travel a distance such as trains and trolleys.	MP23901
Transportation - Nautical	A photograph where the focus of the subject uses water as a means of travel such as a sailboat, cruise ship, tug boat, or cargo ship.	MP23902
Transportation - Aerospace	A photograph where the focus of the subject uses air for their method of travel like an airplane, helicopter, space shuttle or glider.	MP23903



26-27 MS Rulebook

Middle School School Unique to Texas Projects

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Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students ONLY have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Technical Design

These events are designed for students using traditional drafting and computer aided design techniques to create industry documents. All projects must include the required documentation and refer to the Middle School Event Guidelines for submission directions.

Entries that have multiple sheets **MUST** be bound on the left side of the sheets using staples. Unbound sets or sets bound with temporary methods such as paper clips will not be accepted. Maximum sheet size is Arch D (24" x 36").

Title blocks may contain only the following information:

- Student Initials
- Unique Student ID Number
- Category Number
- Title
- Description
- Scale

School logos are not allowed. Students may create their own logo to be used in the title block as long as it does not have any identifying information or reference to the school name.

All student entries must be made from a single unique native file. Each project must be unique in both the final product and any associated electronic file regardless of file type. The only exception is the use of common library parts such as the Content Center in AutoDesk.

Section 3.0 Engineering

Items in this section involve student created engineering projects in which students created projects using traditional drafting or modern computer aided design standards, practices, and methods.

Use of AI applications are prohibited. Use of AI will result in disqualification of entry.

Documentation for these events must include:

- Texas TSA Documentation form

Free Hand Sketching

Shading is Allowed. Shading can be graphite or color pencil only. Single sheet only.

Event	Details	Event #
Mechanical Engineering - Free Hand Sketch of a Single or Multiple Part Mechanical Device. Pen or Pencil Only.	This event is designated for hand sketching only. Traditional board drafting techniques such as but not limited to scales, straight edges, or templates are not permitted. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is allowed but not required. Single sheet only.	MP30000

Working Drawings

Working Drawings - drawings that are used to provide the technical details of a design. Drawings must include the information to recreate the design which could include but not limited to:

- Dimensions
- American National Standard Institute (ANSI) standards of symbols and conventions
- Title
- Scale
- Threading
- Materials
- Notes
- Components such as nuts, bolts and clips are to be included in the working drawings and count as one part regardless of how many are needed.

Working Drawing to include Front, Top, and Right Side Views. Duplicate views can be omitted or a Section View can be used in its place.

Event	Details	Event #
Mechanical Engineering - Working Drawings of a Single or Multiple Parts. Pen or Pencil Only	No illustrating allowed.	MP30100
Mechanical Engineering - Working Drawings of a Single or Multiple Parts. [CADD]	No isometric views allowed.	MP30101
Mechanical Engineering - Working Drawings of a Single Part with a Pictorial View. [CADD]	Working Drawings will also include an Isometric or Oblique View (No Rendering Allowed).	MP30102
Mechanical Engineering - Working Drawings of 2 or More Mechanical Parts. [CADD]	No isometric views allowed.	MP30103
Mechanical Engineering - Working Drawings of 2 or More Mechanical Parts with a Pictorial View. [CADD]	Working Drawings will also include an Isometric or Oblique View (No Rendering Allowed).	MP30104

Pictorial View

Pictorial Drawing - provides a 3D like image to help understand the shape of an object or to assist in interpreting a drawing. There are three types of pictorial drawings: isometric drawings, oblique drawings, and perspective drawings.

No Shading/Rendering Allowed.

Single Sheet Only

Event	Details	Event #
Mechanical Engineering - Pictorial View Only of a Single or Multiple Parts. [CADD]	No Rendering Allowed. Single Sheet Only.	MP30201

Presentation View

Presentation Drawing - the production of a drawing for the purpose of gaining support, such as at a presentation or to “sell” a product.

Assembled view only.

Must be Rendered/Shaded

Single Sheet Only

Event	Details	Event #
Mechanical Engineering - Presentation View Only of a Single or Multiple Parts. Pen or Pencil Only.	Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is required. Single sheet only.	MP30300

Section 3.1 Architecture

Items in this section involve student created architecture projects in which students created projects using traditional drafting or modern computer aided design standards, practices, and methods.

Use of AI applications are prohibited. Use of AI will result in disqualification of entry.

Documentation for these events must include:

- Texas TSA Documentation form

Free Hand Sketching

Event	Details	Event #
Free Hand Sketch of an Architectural Structure. Pen or Pencil Only.	This event is designated for hand sketching only. Traditional board drafting techniques such as but not limited to scales, straight edges, or templates are not permitted. Illustrating using any method including but not limited to pencil, pen, charcoal, or marker is allowed but not required. Single sheet only.	MP31000

Construction Drawings

Construction Drawings - drawings that are used to provide the technical details of a design. Drawings must include the information to recreate the design which could include but not limited to:

- Dimensions
- American National Standard Institute (ANSI) standards of symbols and conventions
- Title
- Scale
- Threading
- Materials
- Notes

Constructions Drawings are to include but not limited to:

- Cover Sheet
- Site Plan
- Existing Floor Plan (Remodel Only)
- Demolition Plan (Remodel Only)
- Floor Plan(s)
- Elevations
- Roof Plan
- Reflected Ceiling Plan (Commercial Only)
- Electrical Drawings - Include at minimum Electrical Outlets, Light Switches, and Lighting.

Event	Details	Event #
Construction Drawings of a Residential Home of Any Type[CADD]	4 Sheets Max. Renderings are allowed but not required.	MP31100

Presentation Drawings

Presentation Drawings are single sheet documents that are used typically for sales. Examples include sales flyers a home builder would hand out of available floor plans in a subdivision, available rental space of a building or warehouse, and presentation to a client.

Residential floor plan must include but not limited to:

- Room Names
- Room Sizes
- Important features but not full dimensions

Commercial floor plans must include but not limited to:

- Area Names
- Area Sizes
- Area Square Footages
- Important features

Exterior views can be rendered, shaded or line views.

Section 3.2 Models

Items in this section involve projects in which students created and designed structures, models, used commercial kits, or highlighted the design process.

Use of AI applications are prohibited. Use of AI will result in disqualification of entry.

The base of a model cannot exceed 24"x36".

Document for these events must include:

- Texas TSA Documentation form
- The floor plan - not to exceed 24"x36"

Finish Models

Finish Model - a scale model that incorporates the materials, design details, topography and landscaping to create a realistic version.

Event	Details	Event #
Finish Model of a Residential Home		MP32000
Finish Model of a Civil Structure	Roadway, Highway, Bridge, Dam, etc.	MP32003
Finish Model of a Mechanical Device		MP32004

Kits

Project Documentation must also include the following items:

Photo documentation of kit assembly

Event	Details	Event #
Kits - Wood		MP32300
Kits - Metal		MP32301
Kits - Electrical/Electronics		MP32302
Kits - Other		MP32303



26-27 MS Rulebook

Middle School School Unique to Texas Projects

Middle School Unique to Texas Projects (UTE-Projects) are events that are unique to the state of Texas and can be competed at the regional and state level.

Projects can be completed either individually or as a team. When registering the project for the Regional Competition, the project will be registered to one student of a team.

Regions may enter up to 5 projects for each UTE-Project event.

If students ONLY have events in this category, they may register as a virtual competitor and attendance is not required.

Students are responsible for reviewing and following the general rules and guidelines established in the:

- General Rules and Regulations
- Copyright Policy
- Student Uniqueness of Work Policy/AI Policy
- Required Documentation

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.

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.

Applied Technical Science

These events are designed for students learning about the practical application of science and technology. All projects must include the required documentation and refer to the Middle School Event Guidelines for submission directions.

Section 4.0 Displays and Portfolios

Items in this section involve projects displaying and explaining the information a student a student has researched about the topics. The project should be suitable to be used as a teaching aide about the subject. Use of AI applications are prohibited. The displays footprint will not exceed 24"x36".

Use of AI will result in disqualification of entry.

Documentation for these events must include:

- Texas TSA Documentation form

Multidisciplinary

Event	Details	Event #
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Cross-Curricular Learning Activities for 2 or More School Disciplines		MP40000
Stem Career Display		MP40001
Manufacturing		
Event	Details	Event #
Output Interface		MP40100
Input Controlled Interface		MP40101
Energy		
Event	Details	Event #
Energy Mechanical		MP40200
Energy Heat		MP40201
Energy Electrical		MP40202
Energy Nuclear		MP40203
Energy Light		MP40204
Energy Alternative		MP40205
Power		
Event	Details	Event #
Power Heat		MP40300
Power Electrical		MP40301
Power Chemical		MP40302
Power Nuclear		MP40303
Power Light		MP40304
Power Hydraulic		MP40305
Power Pneumatic		MP40306
Transportation		
Event	Details	Event #
Transportation Land		MP40400
Transportation Sea		MP40401
Transportation Air		MP40402
Transportation Space		MP40403
Transportation Stationary (Conveyors)		MP40404
Transportation Systems/Industries		MP40405
Robotics		
Event	Details	Event #
Robotics Programming To 25 Lines Max		MP40500

Robotics Programming To 26 Lines Or More		MP40501
Robotics Competitive Robot Display	This is display to showcase a robot that competed at a robotics competition during the current school year. The display should showcase both the design process and performance at competition. Engineering Notebook must be a part of the display. Due to size limitations, the robot can be represented via photos on the display.	MP40502
Robotics Remote Operated Vehicle Display		MP40503

REC Foundation

Robotics

Texas TSA State Conference will be hosting an INVITATIONAL Robotics Competitions in partnership with the REC Foundation (recf.org). The state tournament will follow the rules and guidelines for the RECF 2026-2027 games posted on recf.org. Any modifications to the RECF rules will be posted in the state contest competition guidelines.

The top 3 HS and top 3 MS teams will be given the option of representing Texas TSA and the national conference in their robotics competition.

Chapters interested in receiving an invitation must register their robotics teams with both [Texas TSA](#) and [RECF](#).

Completed registration includes:

- TSA Chapter has completed affiliation process and is in good standing with their region, state, and national TSA organizations.
- Chapter has registered the team with the REC Foundation (recf.org for directions) This must be done by 12/18/2026.
- Complete the [Texas TSA Robotics team registration survey](#) by 12/18/2026.
- Students on the team have been rostered on the National TSA website and included on the Texas TSA Robotics' Teams Registration.

Attendance at the state conference is required of any students competing in this category. Students not registered with the team by 12/18/2026 will not be registered with the team for the state conference if a state spot is earned.

- You can verify your registration status at:
<https://datastudio.google.com/reporting/d3d17386-c1dc-4a76-984f-391d578ae95d>

The invitation to compete at the state conference will come from the Texas State Conference. To be eligible for an invitation teams must:

- Complete the robotics registration process by the 12/18/2026 deadline.
- Compete in at least 1 RECF recognized tournament before 2/10/2027 and have a recorded skills score on the RECF World Skill Scores. The top scores in the state will receive an invitation to the tournament. Top 3 from each region with eligible scores will be sent an invitation to compete and any remaining spots will be filled by the remaining teams with the top Skills score. Limit of 3 teams per chapter.
- Last day scores will be pulled is 2/10/2027 and invites will be sent out soon after, before state registration opens.
- Provide at least 1 volunteer at the state conference to help with the tournament.

Important: Ignorance of the rules and/or misunderstanding of these guidelines is not an excuse for a protest or additional consideration. A recognized tournament is one that has results posted with recf.org. Please contact robotics@texastsa.org if you have any questions.

RECF Achive Robotics Competition (blended MS & HS)

Entry Limits

- Invitational Only Tournament – invitations will be sent to teams with highest Solo Scores
- Maximum of 3 teams per Chapter

Additional Information

- All teams will need to have a driver available during the matches to be eligible to compete.
- A tournament will be run but no solo matches and the top 10 teams from the tournament will participate in an interview.
- Engineering Notebooks will not be evaluated at state.
- Conference competition dress code must be followed to compete.

RECF Engage Robotics Competition (MS Only)

Entry Limits

- Invitational Only Tournament – invitations will be sent to teams with highest Solo Scores Maximum of 3 teams per Chapter

Additional Information

- All teams will need to have a driver available during the matches to be eligible to compete.
- Conference competition dress code must be followed to compete.

**TEXAS**
TSA
TECHNOLOGY STUDENT ASSOCIATION

TEXAS TSA ROBOTICS
REGISTRATION & INVITATION REQUIREMENTS

**REC**
FOUNDATION



Chapters interested in receiving an invitation must register their robotics teams with **BOTH** Texas TSA and RECF.

COMPLETED REGISTRATION INCLUDES:



1. TSA Chapter has completed affiliation process and is in good standing with their region, state, and national TSA organizations.



2. Chapter has registered the team with RECF (recfevents.org).
This must be done by 12/18/2026.



3. Complete the Texas TSA Robotics Team registration survey (bit.ly/4fqxLHV).
This must be done by 12/18/2026.



4. Students on the team have been rostered on the National TSA website and included on the Texas TSA Robotics' Teams Registration.



5. Attendance at the state conference is required of any students competing in this category. Students not registered with the team by **12/18/2026** will not be registered with the team for the state conference if a state spot is earned.



YOU CAN VERIFY YOUR REGISTRATION STATUS AT:
Scan the QR code to view your registration status dashboard.





TO BE ELIGIBLE FOR AN INVITATION

The invitation to compete at the state conference will come from the Texas State Conference. To be eligible for an invitation teams must:



1 Complete the robotics registration process by the **12/18/2026** deadline.



2 Compete in at least 1 RECF recognized tournament before **2/10/2027** and have a recorded solo score on the RECF World Solo Scores.

- The top scores in the state will receive an invitation to the tournament.
- Top 3 from each region with eligible scores will be sent an invitation to compete and any remaining spots will be filled by the remaining teams with the top solo scores. **Limit of 3 teams per chapter.**



3 Last day scores will be pulled is **2/10/2027** and invites will be sent out soon after, before state registration opens.



4 Provide at least 1 volunteer at the state conference to help with the tournament.



KEY DEADLINES

12/18/2026 – Registration & survey deadline

2/10/2027 – Last day to earn qualifying scores



10/10/26

v27.4

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UTE Project Rubrics

Architecture

CNC,CAM, & 3D Printing

Computer Science

Displays and Portfolios

Engineering

Graphic Design

Metal

Models and Prototypes

Multimedia

Other Materials

Photography

Wood

UNIQUE TO TEXAS PROJECTS

ARCHITECTURE

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate
*If an item is missing, leave the box next to the item blank and place a checkmark
*If a check is placed in RUBRIC IS NOT, the entry is not judged and is rejected

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I

CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Simple structure with limited design depth.	Moderate architectural complexity.	Advanced architectural planning and spatial design.	Highly complex, detailed, multi-system architectural design.	
Originality – Original Concept	Generic or standard copied building concept.	Some originality in subject/layout/design.	Distinct architectural concept with identity.	Highly innovative or rare subject and with unique architectural vision.	
Creativity – Visual/Aesthetic Impact	Weak or unclear presentation drawings.	Functional but basic visuals.	Strong architectural presentation quality.	Exceptional, presentation-quality architectural visuals.	
Craftsmanship – Technical Execution	Inaccurate or incomplete drawings/models.	Generally accurate with minor errors.	Precise architectural drawings/models.	Highly precise, professional architectural execution.	
SUBTOTAL (50 points)					

Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations.

- (A) Submitted in an incorrect format
- (B) Exceeds Time Limits or Project Size limits
- (C) Student or School Name on Project (this does NOT include names of file attachments)
- (D) Event Specific Rules

Indicate the Rule Violated:

TIER I SUBTOTAL (50 points)

Tier II

CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	No evidence of site or design research.	Basic research of structure/function.	Strong research influences design decisions.	Extensive architectural research and contextual analysis.	
Student Effort – Skill Application & Revision	Minimal drafting or revision.	Some revisions and corrections.	Multiple refinements were used to improve design quality.	Continual professional-level architectural refinement was used during the design process.	
Originality – Creative Problem Solving	Poor spatial or structural solutions.	Basic solutions to design constraints.	Creative resolution of spatial/design challenges.	Exceptional architectural problem-solving innovation.	
Creativity – Innovation & Use of Design Principles	Poor use of scale, balance, or proportion.	Basic architectural principles applied.	Strong use of architectural design principles.	Expert integration of architectural theory and design.	
Craftsmanship – Attention to Detail & Presentation	Poor layout and unclear presentation.	Acceptable organization.	Clean, professional presentation set.	Studio-quality architectural presentation/design board.	
TIER 2 SUBTOTAL (50 points)					

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)

Total (100 points)

Judge Comments:

Internal Comments:

UNIQUE TO TEXAS PROJECTS

CNC, CAM & 3D Printing

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate
* If an item is missing, leave the box next to the item blank and place a checkmark
* If a check is placed in RUBRIC IS NOT, the entry is not judged and is rejected

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all the required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Project demonstrates limited difficulty, skill development, or technical challenge.	Project includes moderate complexity and demonstrates basic manufacturing skills.	Project demonstrates advanced techniques, multiple processes, or substantial technical challenges.	Project demonstrates sophisticated engineering decisions, advanced manufacturing skills, and effective execution.	
Originality – Original Concept	The concept closely copies an existing work, template, or example with little to no original contribution from the student.	The concept has some originality but relies heavily on familiar formulas, common themes, or provided templates.	The central idea is clearly the student's own — fresh and reflective of individual perspective rather than a borrowed template.	The concept is highly original and distinctly the student's own. The idea is inventive and stands out from typical entries in the category.	
Creativity – Visual/Aesthetic Impact	Design appears unfinished, lacks visual appeal, or shows little consideration for aesthetics.	Design is functional and visually acceptable but lacks strong creative elements.	Design is visually appealing, balanced, and demonstrates thoughtful artistic choices.	Design is highly engaging, aesthetically exceptional, and demonstrates outstanding creative vision.	
Craftsmanship – Technical Execution	Significant construction flaws, poor fit, misalignment, or weak assembly are evident.	Construction is generally sound with minor flaws that do not significantly impact quality.	Construction demonstrates strong precision, accuracy, and solid manufacturing skills. There are only minor imperfections.	Construction demonstrates flawless precision, exact dimensional accuracy, and expert manufacturing skills. There are no visible imperfections.	
SUBTOTAL (50 points)					
Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations. (A) Submitted in an incorrect format (B) Exceeds Time Limits or Project Size limits (C) Student or School Name on Project (this does NOT include names of file attachments) (D) Event Specific Rules					Indicate the Rule Violated:
TIER I SUBTOTAL (50 points)					
Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Limited evidence of planning, design, fabrication, or project progression.	Some evidence of project development, materials, and manufacturing processes.	Clear documentation of design decisions, manufacturing methods, challenges, and solutions.	Comprehensive record of planning, design iterations, manufacturing processes, testing, and problem-solving throughout the project.	
Student Effort – Skill Application & Revision	Little evidence of relevant technical skills. No meaningful revision is apparent; the work appears to be an unrefined first attempt.	Basic technical skills are applied correctly but inconsistently. Minor revisions are evident but improvements are superficial.	Technical skills are applied correctly and consistently. Documentation or the final product shows meaningful revisions based on self-evaluation or feedback.	Advanced technical skills are applied masterfully. Multiple rounds of thoughtful revision are clearly documented, demonstrating a reflective, iterative process.	
Originality – Creative Problem Solving	Choices follow a predictable, formulaic approach with no unique decisions. Unauthorized copyrighted content or prohibited AI-generated material may be present.	Some individual decisions are evident but most choices default to the obvious solution. All content appears original but documentation is limited.	The student made intentional, unique decisions in composition, narrative, or technical approach. All content is verifiably original student work.	The student consistently made distinctive, clever creative decisions throughout. All content is original and documentation clearly confirms full student ownership.	
Creativity – Innovation & Use of Design Principles	The work is generic and predictable. Design principles (balance, contrast, emphasis, unity, etc.) are largely ignored or misapplied.	Some imagination is shown, but the project stays safely within expected norms. Design principles are applied but feel accidental rather than intentional.	The student explored a notable or unexpected approach. Design principles are applied correctly and intentionally, contributing to an effective final work.	The project is genuinely inventive and memorable. Design principles are applied masterfully throughout, creating a visually sophisticated and standout result.	
Craftsmanship – Attention to Detail & Presentation	Finishing work is incomplete, functionality is limited, or details are overlooked.	Finish and functionality meet expectations with minor imperfections.	Finish is clean and professional; project functions as intended with strong attention to detail.	Finish is outstanding, functionality is flawless, and attention to detail is evident throughout every aspect of the project.	
TIER 2 SUBTOTAL (50 points)					
(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)					Total (100 points)
Judge Comments: Internal Comments:					

UNIQUE TO TEXAS PROJECTS **COMPUTER SCIENCE** **2026 & 2027 OFFICIAL RATING FORM**

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate "Y" if an item is missing, leave the box next to the item blank and place a checkmark.
 *If a check is placed in RUBRIC IS NOT, the entry is not judged and is re-

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Project demonstrates limited complexity. Features, functionality, and technical requirements are basic and narrowly focused.	Project demonstrates moderate complexity and includes multiple features, components, or technical requirements appropriate to project goals.	Project demonstrates significant complexity through advanced functionality, multiple integrated systems, databases, APIs, algorithms, or interactive components.	Project demonstrates exceptional complexity and ambition. Advanced architectures, sophisticated algorithms, extensive functionality, or multiple integrated technologies are successfully implemented.	
Originality – Original Concept	Project closely resembles common examples, tutorials, templates, or existing applications with limited evidence of independent thinking.	Project incorporates some original features, modifications, or adaptations of existing concepts.	Project demonstrates a distinctive concept with clear evidence of independent problem-solving and creative development.	Project demonstrates exceptional originality and innovation. The solution is highly unique, addresses a meaningful problem, and reflects strong independent vision and creativity.	
Creativity – Visual/Aesthetic Impact	User interface, visual design, or user experience lacks cohesion, clarity, or professionalism. Design may hinder usability.	User interface and visual design are functional and generally support user interaction. Basic design principles are evident.	Visual design and user experience are engaging, cohesive, and professionally executed. Design choices enhance usability and overall effectiveness.	User interface and visual design demonstrate exceptional polish and sophistication. Visual elements enhance functionality, engagement, accessibility, and user satisfaction.	
Craftsmanship – Technical Execution	Significant technical issues reduce functionality. Errors, crashes, broken features, poor performance, or inconsistent behavior are evident. Code quality may be weak or difficult to maintain.	Project functions as intended with minor technical issues. Code and implementation demonstrate appropriate competency and reliability.	Technical execution demonstrates strong programming practices, stable functionality, efficient implementation, and reliable performance. Features operate as intended with minimal issues.	Technical execution reflects professional-level software development standards. Code quality, performance, scalability, security, reliability, and functionality demonstrate exceptional technical proficiency.	
SUBTOTAL (50 points)					
Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations. (A) Submitted in an incorrect format (B) Exceeds Time Limits or Project Size limits (C) Student or School Name on Project (this does NOT include names of file attachments) (D) Event Specific Rules					Indicate the Rule Violated:
TIER I SUBTOTAL (50 points)					
Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little evidence of planning, research, requirements analysis, or user consideration. Design and development decisions appear unsupported.	Basic planning and research are evident. Some consideration is given to user needs, project goals, technologies, and implementation requirements.	Research and planning clearly influence design and development decisions. User requirements, technology selection, system design, and project objectives are thoughtfully considered.	Extensive planning and research guide every aspect of the project. User needs, technical requirements, industry practices, feasibility, and implementation strategies are thoroughly analyzed and documented.	
Student Effort – Skill Application & Revision	Limited evidence of technical skill development or iterative improvement. Few revisions or refinements are documented.	Appropriate programming and development skills are demonstrated. Some revisions, debugging, and refinements occur during development.	Strong technical skills are consistently applied. Multiple iterations, testing cycles, and refinements improve functionality, efficiency, and user experience.	Exceptional mastery of programming and development skills is evident throughout the project. Revisions are strategic, extensive, and result in substantial improvements to performance, usability, and overall quality.	
Originality – Creative Problem Solving	Technical challenges are addressed with limited effectiveness. Solutions may be simplistic, incomplete, or poorly matched to project goals.	Practical solutions address common programming and development challenges. Functionality generally supports project objectives.	Creative solutions effectively address technical, usability, or system design challenges while improving performance and user experience.	Innovative solutions demonstrate exceptional computational thinking, technical reasoning, and adaptability. Problem-solving significantly enhances functionality, efficiency, and project impact.	
Creativity – Innovation & Use of Design Principles	Limited application of design principles related to user experience, interface design, information architecture, accessibility, or interaction design. Innovation is minimal.	Basic design principles are appropriately applied. Some innovative features contribute to usability or functionality.	Design principles are intentionally and effectively integrated to improve usability, accessibility, engagement, and overall user experience. Innovation contributes meaningfully to project success.	Design principles are expertly applied throughout the project. Innovation is substantial and purposeful, resulting in an exceptional user experience and highly effective solution design.	
Craftsmanship – Attention to Detail & Presentation	Errors, inconsistencies, incomplete features, poor navigation, formatting issues, or presentation deficiencies detract from the project.	Most features are complete and functional. Presentation is organized and appropriate with only minor imperfections.	Strong attention to detail is evident throughout the project. Features, navigation, documentation, demonstrations, and presentation are polished and professional.	Exceptional attention to detail is evident in every aspect of the project. The solution is refined, thoroughly tested, professionally presented, and competition-ready. Code is formatted correctly and includes comments.	
TIER 2 SUBTOTAL (50 points)					
(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)					Total (100 points)
Judge Comments: Internal Comments:					

UNIQUE TO TEXAS PROJECTS

DISPLAY & PORTFOLIOS

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate
 *If an item is missing, leave the box next to the item blank and place a checkmark
 *If a check is placed in RUBRIC IS NOT, the entry is not judged and is ready

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I

CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Simple or limited display.	Moderate scope and content.	Advanced, multi-section presentation.	Highly complex, multi-layered professional presentation.	
Originality – Original Concept	Generic display/portfolio.	Some originality in layout/content.	Distinct presentation concept.	Highly original and innovative presentation design.	
Creativity – Visual/Aesthetic Impact	Poor visual layout.	Functional but basic design.	Strong visual communication and layout.	Exceptional, highly engaging visual presentation.	
Craftsmanship – Technical Execution	Errors in formatting or assembly.	Minor inconsistencies present.	Clean and accurate presentation.	Flawless professional presentation execution.	
SUBTOTAL (50 points)					

Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations.
 (A) Submitted in an incorrect format
 (B) Exceeds Time Limits or Project Size limits
 (C) Student or School Name on Project (this does NOT include names of file attachments)
 (D) Event Specific Rules

Indicate the Rule Violated:

TIER I SUBTOTAL (50 points)

Tier II

CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little planning or justification.	Basic planning evident.	Strong research informs content selection.	Extensive research drives all presentation choices.	
Student Effort – Skill Application & Revision	Minimal refinement.	Some improvements made.	Multiple revisions improve quality.	Iterative refinement produces professional-level work.	
Originality – Creative Problem Solving	Weak organization of information.	Basic organization strategies.	Creative organization enhances clarity.	Innovative presentation strategies maximize communication.	
Creativity – Innovation & Use of Design Principles	Poor use of layout/design principles.	Basic design structure.	Strong use of design principles.	Expert-level visual communication design.	
Craftsmanship – Attention to Detail & Presentation	Disorganized or incomplete presentation.	Acceptable organization.	Polished and professional presentation.	Highly refined, competition-ready presentation.	
TIER 2 SUBTOTAL (50 points)					

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.) **Total (100 points)**

Judge Comments:

Internal Comments:

UNIQUE TO TEXAS PROJECTS ENGINEERING

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate
* If an item is missing, leave the box next to the item blank and place a checkmark
* If a check is placed in RUBRIC IS NOT, the entry is not judged and is re

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I

CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Simple or incomplete engineering solution with minimal challenge.	Moderate complexity with basic engineering principles applied.	Advanced engineering concepts and multiple systems integrated.	Highly complex, sophisticated engineering solution with significant depth.	
Originality – Original Concept	Common or copied idea with little originality.	Some modification of existing ideas.	Distinct engineering concept with creative elements.	Highly original engineering solution addressing a unique problem.	
Creativity – Visual/Aesthetic Impact	Poor presentation of design/model.	Functional but basic visual presentation.	Clear, well-designed and visually effective engineering presentation.	Highly polished, professional, and visually compelling design.	
Craftsmanship – Technical Execution	Major flaws in build/model accuracy or function.	Generally functional with minor issues.	Accurate, well-built, and functional engineering model/design.	Precision-built, highly accurate, fully functional engineering solution.	
SUBTOTAL (50 points)					

Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations.
(A) Submitted in an incorrect format
(B) Exceeds Time Limits or Project Size limits
(C) Student or School Name on Project (this does NOT include names of file attachments)
(D) Event Specific Rules

Indicate the Rule Violated:

TIER I SUBTOTAL (50 points)

Tier II

CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little/no research or justification of design decisions.	Basic research with limited influence on design choices.	Research clearly informs engineering decisions and constraints.	Extensive research and analysis directly drive all engineering decisions.	
Student Effort – Skill Application & Revision	Minimal skill use and little evidence of revision.	Some skill application and minor improvements.	Strong engineering skills with multiple refinements.	Expert-level skill application with continuous, data-driven improvements.	
Originality – Creative Problem Solving	Ineffective or incomplete solutions.	Basic solutions to expected problems.	Effective and creative problem-solving strategies.	Highly innovative solutions to complex engineering challenges.	
Creativity – Innovation & Use of Design Principles	Little use of engineering/design principles.	Basic application of design principles.	Strong use of engineering principles improves design.	Masterful application of principles enhances performance and efficiency.	
Craftsmanship – Attention to Detail & Presentation	Poor finishing and unclear presentation.	Acceptable finish with minor inconsistencies.	Clean, professional presentation and finish.	Exceptional craftsmanship and professional-grade presentation quality.	
TIER 2 SUBTOTAL (50 points)					

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)

Total (100 points)

Judge Comments:

Internal Comments:

UNIQUE TO TEXAS PROJECTS **GRAPHIC DESIGN** **2026 & 2027 OFFICIAL RATING FORM**

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate
 *If an item is missing, leave the box next to the item blank and place a checkmark
 *If a check is placed in RUBRIC IS NOT, the entry is not judged and is resubmitted

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Project demonstrates limited complexity, challenge, or design development. Few design elements or communication objectives are addressed.	Project demonstrates moderate complexity and addresses multiple design elements and communication goals.	Project incorporates advanced design techniques, multiple communication objectives, or sophisticated visual solutions. Scope exceeds basic expectations.	Project demonstrates exceptional complexity and ambition. Multiple design systems, formats, audiences, or communication challenges are successfully integrated into a highly sophisticated solution.	
Originality – Original Concept	Design closely resembles common examples, templates, or existing designs with little evidence of independent thinking.	Design incorporates some original elements or modifications to existing concepts.	Design demonstrates a distinctive concept with clear evidence of independent creative thinking and customization.	Design exhibits exceptional originality and creativity. The concept is highly unique and demonstrates innovative thinking throughout the project.	
Creativity – Visual/Aesthetic Impact	Design lacks visual appeal, balance, cohesion, or professional quality. Visual elements may appear disconnected or ineffective.	Design demonstrates acceptable visual appeal and basic aesthetic consideration. Elements generally work together to support the message.	Design is visually appealing, cohesive, and professionally executed. Aesthetic choices enhance audience engagement and communication effectiveness.	Design demonstrates exceptional visual impact and artistic quality. The composition is memorable, engaging, and highly effective in communicating its intended message.	
Craftsmanship – Technical Execution	Significant technical issues are evident. Problems with typography, alignment, image quality, spacing, color use, formatting, or production reduce effectiveness.	Technical execution is generally sound with minor errors. Design software and production techniques are used appropriately.	Technical execution demonstrates precision, consistency, and strong design production skills. Typography, layout, imagery, and color are effectively managed.	Technical execution reflects professional-level design standards. Typography, composition, imagery, color management, and production quality demonstrate exceptional skill and precision.	
SUBTOTAL (50 points)					

Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations.
 (A) Submitted in an incorrect format
 (B) Exceeds Time Limits or Project Size limits
 (C) Student or School Name on Project (this does NOT include names of file attachments)
 (D) Event Specific Rules

Indicate the Rule Violated:

TIER I SUBTOTAL (50 points)

Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little evidence of planning, research, audience analysis, or design strategy. Design decisions lack explanation or justification.	Basic planning and research are evident. Some consideration is given to audience, purpose, message, and design requirements.	Research clearly informs design decisions. Planning demonstrates thoughtful consideration of audience, communication goals, branding, typography, and visual hierarchy.	Extensive planning and research guide every aspect of the project. Design decisions are supported by audience analysis, market research, design theory, and strategic communication objectives.	
Student Effort – Skill Application & Revision	Limited evidence of design skill development or refinement. Few revisions or improvements are documented.	Appropriate graphic design skills are demonstrated. Some revisions and improvements occur during development.	Strong design skills are consistently applied. Multiple revisions improve effectiveness, visual quality, and communication.	Exceptional mastery of graphic design skills is evident. Revisions are strategic, documented, and result in significant improvements to the final design solution.	
Originality – Creative Problem Solving	Design challenges are addressed with limited effectiveness. Little evidence of critical thinking or strategic decision-making is present.	Practical solutions address communication and design challenges.	Creative solutions effectively solve visual communication problems while improving audience engagement and message clarity.	Innovative and highly effective solutions demonstrate exceptional critical thinking and strategic design reasoning. Problem-solving significantly enhances communication effectiveness and user experience.	
Creativity – Innovation & Use of Design Principles	Limited application of design principles such as balance, contrast, hierarchy, alignment, repetition, proximity, or typography. Little innovation is evident.	Basic design principles are applied appropriately and support project objectives. Some innovative elements are included.	Design principles are effectively integrated to improve communication usability, and visual appeal. Innovation contributes meaningfully to project success.	Design principles are expertly applied throughout the project. Innovation is substantial, purposeful, and significantly enhances communication, branding, and audience impact.	
Craftsmanship – Attention to Detail & Presentation	Visible errors, inconsistencies, formatting problems, or presentation issues detract from the overall quality of the design.	Most details are completed satisfactorily. Presentation is organized and appropriate, with only minor imperfections.	Strong attention to detail is evident throughout. Design elements are polished, consistent, and professionally presented.	Exceptional attention to detail is evident in every aspect of the project. Presentation is competition-ready and reflects superior quality, refinement, and professionalism.	
TIER 2 SUBTOTAL (50 points)					

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.) **Total (100 points)**

Judge Comments:

UNIQUE TO TEXAS PROJECTS

METAL

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate if an item is missing, leave the box next to the item blank and place a checkmark.
*If a check is placed in RUBRIC IS NOT, the entry is not judged and is resubmitted.

☐	The Project is submitted in the appropriate classification
☐	There are no copyright violations
☐	School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
☐	Project documentation is present.
☐	Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation details the design process and skills used to create the project. Sources are cited.	The project has all the required documentation according to the category's requirements. Documentation details the design process and skills used to create project. Sources are cited.	
Complexity & Scope	Project demonstrates limited technical challenge, complexity, or scope. Processes used are basic and require minimal skill development.	Project demonstrates moderate complexity and includes multiple steps or manufacturing techniques appropriate to the project goals.	Project incorporates advanced techniques, multiple manufacturing processes, or intricate fabrication requirements. Scope exceeds basic expectations.	Project demonstrates exceptional complexity and ambition. Advanced fabrication, machining, welding, forming, assembly, or finishing processes are successfully integrated into a highly challenging project.	
Original Concept	Project closely resembles existing products or common designs with little evidence of independent thought.	Project incorporates some original features or modifications to existing ideas.	Project demonstrates a distinctive concept with clear evidence of independent design thinking and customization.	Project exhibits exceptional originality and creativity. The concept is highly unique and demonstrates substantial innovation beyond conventional designs.	
Visual/Aesthetic Impact	Appearance lacks cohesion, refinement, or visual appeal. Design elements appear disconnected or unfinished.	Project demonstrates acceptable visual appeal and basic consideration of aesthetics. Design elements generally work together.	Design is visually appealing, balanced, and cohesive. Aesthetic choices enhance the project's overall appearance and user experience.	Project demonstrates exceptional visual impact and artistic quality. Design choices create a distinctive and memorable appearance while maintaining functionality.	
Technical Execution	Significant fabrication flaws are evident. Welds, joints, cuts, bends, machining operations, fasteners, assemblies, or finishes show poor quality or inconsistency. Functionality may be compromised.	Construction is generally sound with minor flaws. Fabrication processes are completed successfully and the project functions as intended.	Fabrication demonstrates precision, consistency, and strong technical skill. Welds, joints, assemblies, machining operations, and finishes are well executed and contribute to project quality.	Technical execution reflects professional-level workmanship. Fabrication, machining, welding, fitting, assembly, and finishing demonstrate exceptional precision, accuracy, consistency, and functionality.	
SUBTOTAL (50 points)					
Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations. (A) Submitted in an incorrect format (B) Exceeds Time Limits or Project Size limits (C) Student or School Name on Project (this does NOT include names of file attachments) (D) Event Specific Rules					Indicate the Rule Violated:
TIER I SUBTOTAL (50 points)					
Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little to no planning materials or research are present. No sketches, brainstorming, or sources are included.	Basic planning notes and some research are present but lack detail or a clear connection to the final product.	Clear planning materials (sketches, storyboards, mood boards) and documented research show a logical path from concept to final piece.	Thorough, well-organized planning materials and well-cited research clearly trace the full evolution from initial idea to finished product.	
Student Effort – Skill Application & Revision	Little evidence of relevant technical skills. No meaningful revision is apparent; the work appears to be an unrefined first attempt.	Basic technical skills are applied correctly but inconsistently. Minor revisions are evident but improvements are superficial.	Technical skills are applied correctly and consistently. Documentation or the final product shows meaningful revisions based on self-evaluation or feedback.	Advanced technical skills are applied masterfully. Multiple rounds of thoughtful revision are clearly documented, demonstrating a reflective, iterative process.	
Originality – Creative Problem Solving	Choices follow a predictable, formulaic approach with no unique decisions. Unauthorized copyrighted content or prohibited AI-generated material may be present.	Some individual decisions are evident but most choices default to the obvious solution. All content appears original but documentation is limited.	The student made intentional, unique decisions in composition, narrative, or technical approach. All content is verifiably original student work.	The student consistently made distinctive, clever creative decisions throughout. All content is original and documentation clearly confirms full student ownership.	
Creativity – Innovation & Use of Design Principles	The work is generic and predictable. Design principles (balance, contrast, emphasis, unity, etc.) are largely ignored or misapplied.	Some imagination is shown, but the project stays safely within expected norms. Design principles are applied but feel accidental rather than intentional.	The student explored a notable or unexpected approach. Design principles are applied correctly and intentionally, contributing to an effective final work.	The project is genuinely inventive and memorable. Design principles are applied masterfully throughout, creating a visually sophisticated and standout result.	
Craftsmanship – Attention to Detail & Presentation	Multiple careless errors (typos, misaligned elements, inconsistent formatting) significantly detract from quality. Submission format or packaging does not meet requirements.	A few minor errors are present that careful review would have caught. The project meets basic submission requirements but lacks a polished finish.	The work is largely free of errors. The project is submitted correctly and presented in a clean, organized, professional manner.	The work is meticulously executed with no noticeable errors. Submission format, packaging, labeling, and overall finish are exemplary and reflect clear pride in the work.	
TIER 2 SUBTOTAL (50 points)					
(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)					Total (100 points)
Judge Comments:					
Internal Comments:					

UNIQUE TO TEXAS PROJECTS

MODELS & PROTOTYPES

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate
 *If an item is missing, leave the box next to the item blank and place a checkmark
 *If a check is placed in RUBRIC IS NOT, the entry is not judged and is ready

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	Contains basic required documentation according to category guidelines; lacks thorough detail or technical depth.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Simple prototype with limited technical skill.	Moderate skill was applied to prototype.	Advanced design and technical skills were used to develop and create the prototype.	Prototype or model is fully developed functional and was created with expert technical and design skills.	
Originality – Original Concept	Common or copied prototype idea.	Some originality in design.	Distinct and purposeful prototype concept.	Highly innovative and original prototype solution.	
Creativity – Visual/Aesthetic Impact	Poor presentation or appearance.	Functional but basic model.	Strong visual and functional presentation.	Highly polished, professional prototype appearance.	
Craftsmanship – Technical Execution	Disorganized or incomplete wiring /assembly, unstable physical condition or incomplete operational features	Assembly is complete but construction may be rough. Room for improvement	Functional and well-constructed prototype.	Fully functional, highly refined prototype.	
SUBTOTAL (50 points)					

Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations. (A) Submitted in an incorrect format (B) Exceeds Time Limits or Project Size limits (C) Student or School Name on Project (this does NOT include names of file attachments) (D) Event Specific Rules				Indicate the Rule Violated:	

TIER I SUBTOTAL (50 points)					
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Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little or no design justification.	Basic planning included.	Strong research informs prototype design.	Extensive research and validation support prototype design.	
Student Effort – Skill Application & Revision	Students applied minimal refinements within the scope of the project.	Some testing and improvements were made during project scope.	Multiple steps were taken to improve design and functionality.	Continual changes were made throughout project scope.	
Originality – Creative Problem Solving	Ineffective solutions to design issues.	Basic problem-solving applied.	Creative solutions improve functionality.	Advanced innovative engineering problem-solving.	
Creativity – Innovation & Use of Design Principles	Weak application of design principles.	Basic design structure used.	Strong application of design principles.	Expert integration of form, function, and usability.	
Craftsmanship – Attention to Detail & Presentation	Poor finishing or incomplete prototype.	Acceptable finish.	Clean and professional presentation.	Exceptional, industry-level prototype presentation.	
TIER 2 SUBTOTAL (50 points)					

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)				Total (100 points)	
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Judge Comments:					
Internal Comments:					

UNIQUE TO TEXAS PROJECTS

ENGINEERING & ARCHITECTURE MODELS

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate
 *If an item is missing, leave the box next to the item blank and place a checkmark
 *If a check is placed in RUBRIC IS NOT, the entry is not judged and is ready

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I

CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Simple or incomplete model with limited design depth.	Moderate complexity model.	Advanced, detailed model construction. Design details are visible.	Extremely complex, highly detailed model system.	
Originality – Original Concept	Generic or common model.	Some originality in design.	Distinct and purposeful model concept.	Highly original and innovative model concept.	
Creativity – Visual/Aesthetic Impact	Weak or unclear model appearance.	Functional but simple appearance.	Visually strong and well-designed model.	Highly realistic and visually compelling model.	
Craftsmanship – Technical Execution	Poor construction accuracy.	Functional but inconsistent build.	Accurate, well-constructed model.	Precision-crafted, highly detailed model.	
SUBTOTAL (50 points)					

Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations.
 (A) Submitted in an incorrect format
 (B) Exceeds Time Limits or Project Size limits
 (C) Student or School Name on Project (this does NOT include names of file attachments)
 (D) Event Specific Rules

Indicate the Rule Violated:

TIER I SUBTOTAL (50 points)

Tier II

CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little planning or reference use.	Basic planning of model design.	Research clearly informs model accuracy.	Extensive research ensures highly accurate model development.	
Student Effort – Skill Application & Revision	Minimal refinement or adjustment.	Some corrections made.	Multiple improvements enhance model quality.	Iterative refinement produces professional-level model.	
Originality – Creative Problem Solving	Poor resolution of modeling challenges.	Basic solutions applied.	Effective creative solutions.	Innovative problem-solving improves model significantly.	
Creativity – Innovation & Use of Design Principles	Limited use of proportion/scale.	Basic design accuracy.	Strong application of modeling principles.	Masterful use of scale, proportion, and realism.	
Craftsmanship – Attention to Detail & Presentation	Poor finishing and presentation.	Acceptable finish.	Clean, polished presentation.	Professional exhibition-quality model presentation.	
TIER 2 SUBTOTAL (50 points)					

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)

Total (100 points)

Judge Comments:

Internal Comments:

UNIQUE TO TEXAS PROJECTS

MULTIMEDIA

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate "Go" or "No Go".

*If an item is missing, leave the box next to the item blank and place a checkmark in the "Go" column.

*If a check is placed in RUBRIC IS NOT, the entry is not judged and is resubmitted.

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	Missing most required documentation according to category guidelines.	Includes some or all required documentation, but lacks detail on design or creation choices.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Demonstrates low technical skills. Minimal use of design, video, and/or animation techniques.	Demonstrates moderate technical skills, combining basic graphic, video, and/or animation components.	Demonstrates strong technical skill through advanced editing, design assets, and/or multi-media integration.	Demonstrates exceptional technical skill, seamlessly integrating graphics, video, audio, and/or animated elements into a unified media project.	
Originality – Original Concept	Project relies heavily on common ideas, templates, or existing media formats with little evidence of original thought.	Project includes some original elements or adaptations of familiar concepts. Creative thinking is evident but may not be fully developed.	Project demonstrates a distinctive concept with clear evidence of independent creative thinking and purposeful design choices.	Project demonstrates exceptional originality and creative vision. The concept is unique, memorable, and innovative throughout the production.	
Creativity – Visual/Aesthetic Impact	Elements lack cohesion, polish, or audience appeal. Design choices may distract from the intended message.	Elements are visually and/or audibly appealing. Basic design and presentation principles support the content.	Elements are cohesive, engaging, and professionally executed. Design choices effectively support clear communication and audience engagement.	Demonstrates exceptional visual and/or audio impact. Every element contributes to a compelling, memorable, and highly engaging audience experience.	
Craftsmanship – Technical Execution	Significant technical or design issues reduce effectiveness. Problems with audio quality, video quality, editing, animation, synchronization, navigation, transitions, or file functionality are evident.	Technical execution is generally sound with minor errors. Production tools and techniques are used appropriately.	Technical execution demonstrates precision, consistency, and strong technical and design skills. Audio, video, animation, editing, timing, and transitions are effectively executed.	Technical execution reflects professional-level design standards. Elements are seamlessly integrated, technically polished, and demonstrate exceptional proficiency with design tools and techniques.	
SUBTOTAL (50 points)					
Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations. (A) Submitted in an incorrect format (B) Exceeds Time Limits or Project Size limits (C) Student or School Name on Project (this does NOT include names of file attachments) (D) Event Specific Rules					Indicate the Rule Violated:
TIER I SUBTOTAL (50 points)					
Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little evidence of planning, content research, or design/production strategy. Design and production decisions appear unsupported.	Basic planning and research are evident. Some consideration is given to audience, purpose, content organization, and production requirements.	Research and planning clearly influence production decisions. Audience needs, communication goals, content structure, and media selection are thoughtfully considered.	Extensive planning and research guide every aspect of the production. Audience analysis, content development, production strategy, and communication objectives are thoroughly explored and directly influence project decisions.	
Student Effort – Skill Application & Revision	Limited evidence of technical skill development or project refinement. Few revisions or improvements are documented.	Appropriate design/production skills are demonstrated. Some revisions and refinements occurred during development.	Strong design/production skills are consistently applied. Revisions and editing demonstrate thoughtful evaluation and meaningful improvement of content, pacing, design, and technical quality.	Exceptional application of design and multimedia production skills is evident throughout the project. Revisions are strategic, extensive, and result in substantial improvements to communication effectiveness and overall quality.	
Originality – Creative Problem Solving	Technical or layout challenges are poorly addressed. Solutions are generic or ineffective.	Resolves typical video, graphic, or animation layout issues with practical solutions.	Creative solutions effectively address technical, organizational, or communication challenges while enhancing audience understanding and engagement.	Innovative solutions demonstrate exceptional critical thinking, adaptability, and design/production expertise. Design/Editing decisions significantly enhance the effectiveness and quality of the project.	
Creativity – Innovation & Use of Design Principles	Limited application of design principles such as composition, pacing, visual hierarchy, balance, typography, sequencing, or transitions. Innovation is minimal.	Basic design principles are appropriately applied. Some innovative production techniques or presentation methods are evident.	Design principles are intentionally and effectively integrated to improve communication, engagement, and user experience. Innovation strengthens the production.	Design principles are expertly applied throughout the production. Innovation is substantial, purposeful, and significantly enhances communication effectiveness and audience impact.	
Craftsmanship – Attention to Detail & Presentation	Visible errors, inconsistencies, formatting issues, timing problems, or presentation deficiencies detract from the overall quality of the production.	Most details are completed satisfactorily. Presentation is organized and appropriate with only minor imperfections.	Strong attention to detail is evident throughout the production. Content, timing, formatting, transitions, and presentation are polished and professional.	Exceptional attention to detail is evident in every aspect of the production. Presentation is highly polished, competition-ready, and reflects superior quality, refinement, and professionalism.	
TIER 2 SUBTOTAL (50 points)					
(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)					Total (100 points)
Judge Comments:					
Internal Comments:					

UNIQUE TO TEXAS PROJECTS

OTHER MATERIALS

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate "Yes" or "No" in the box next to the item blank and place a checkmark in the box next to the item blank and place a checkmark in the box next to the item blank.

*If an item is missing, leave the box next to the item blank and place a checkmark in the box next to the item blank.

*If a check is placed in RUBRIC IS NOT, the entry is not judged and is rejudged.

☐ The Project is submitted in the appropriate classification
 ☐ There are no copyright violations
 ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
 ☐ Project documentation is present.
 ☐ Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Project demonstrates limited complexity, challenge, or technical difficulty. Construction methods and processes are basic.	Project demonstrates moderate complexity and includes multiple steps, techniques, or materials appropriate to the project goals.	Project incorporates advanced techniques, multiple processes, intricate design requirements, or sophisticated material applications. Scope exceeds basic expectations.	Project demonstrates exceptional complexity and ambition. Multiple advanced processes, materials, and design elements are successfully integrated into a highly challenging project.	
Originality – Original Concept	Project closely resembles common products, examples, or existing designs with little evidence of independent thought.	Project incorporates some original features or modifications to existing ideas.	Project demonstrates a distinctive concept with clear evidence of creativity and independent design thinking.	Project exhibits exceptional originality and imagination. The concept is highly unique and demonstrates innovative thinking throughout the design process.	
Creativity – Visual/Aesthetic Impact	Appearance lacks cohesion, refinement, or visual appeal. Limited consideration is given to aesthetics or user experience.	Project demonstrates acceptable visual appeal and basic aesthetic considerations. Design elements generally work together.	Design is visually appealing, balanced, and cohesive. Aesthetic choices enhance the project's overall appearance and effectiveness.	Project demonstrates exceptional visual impact and artistic quality. Design choices create a memorable and engaging appearance while supporting functionality.	
Craftsmanship – Technical Execution	Construction quality is inconsistent. Assembly, fabrication, forming, joining, molding, finishing, or other manufacturing processes show significant flaws. Functionality may be compromised.	Construction is generally sound with minor flaws. Manufacturing processes are completed successfully and the project functions as intended.	Construction demonstrates precision, consistency, and strong technical skill. Materials are effectively manipulated and assembled to achieve high-quality results.	Technical execution reflects professional-level workmanship. Fabrication, assembly, finishing, and material processing demonstrate exceptional precision, accuracy, consistency, and functionality.	
SUBTOTAL (50 points)					
Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations. (A) Submitted in an incorrect format (B) Exceeds Time Limits or Project Size limits (C) Student or School Name on Project (this does NOT include names of file attachments) (D) Event Specific Rules					Indicate the Rule Violated:
TIER I SUBTOTAL (50 points)					
Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little evidence of planning, research, or analysis. Design choices, materials, and manufacturing methods lack justification.	Basic planning and research are evident. Some rationale is provided for material selection, construction methods, and design decisions.	Research clearly influenced design, material selection, and manufacturing processes. Planning demonstrates thoughtful preparation and informed decision-making.	Extensive planning and research guide every phase of the project. Decisions are supported by technical information, testing, analysis, and a strong understanding of material properties and manufacturing methods.	
Student Effort – Skill Application & Revision	Limited evidence of technical skill development or project refinement. Few revisions or improvements are documented.	Appropriate skills are demonstrated. Some modifications, adjustments, or refinements were made during development.	Strong technical skills are consistently applied. Multiple revisions and refinements improve project quality, functionality, or appearance.	Exceptional skill mastery is evident throughout the project. Revisions are intentional, well documented, and result in substantial improvements to the final product.	
Originality – Creative Problem Solving	Challenges are addressed with limited effectiveness or not addressed at all. Little evidence of critical thinking is present.	Practical solutions address common design or construction challenges.	Creative solutions effectively overcome challenges related to materials, construction, functionality, or design.	Innovative and highly effective solutions demonstrate exceptional critical thinking, adaptability, and resourcefulness. Problem-solving significantly enhances project quality and performance.	
Creativity – Innovation & Use of Design Principles	Limited application of design principles. Little innovation is evident in form, function, construction, or material usage.	Basic design principles are applied appropriately and support project objectives. Some innovative elements are included.	Design principles are effectively integrated to improve appearance, usability, functionality, or efficiency. Innovation contributes meaningfully to project success.	Design principles are expertly applied throughout the project. Innovation is substantial, purposeful, and significantly advances both form and function.	
Craftsmanship – Attention to Detail & Presentation	Visible defects, unfinished areas, rough edges, poor alignment, or presentation shortcomings detract from the project.	Most details are completed satisfactorily. Finishes and presentation are appropriate, with only minor imperfections present.	Strong attention to detail is evident throughout. Finishes, alignment, assembly, labeling, and presentation are polished and professional.	Exceptional attention to detail is evident in every aspect of the project. Finishes, presentation, fit, appearance, and overall execution reflect competition-ready quality and superior workmanship.	
TIER 2 SUBTOTAL (50 points)					
(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)					Total (100 points)
Judge Comments:					
Internal Comments:					

UNIQUE TO TEXAS PROJECTS

PHOTOGRAPHY

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate
*If an item is missing, leave the box next to the item blank and place a checkmark
*If a check is placed in RUBRIC IS NOT, the entry is not judged and is re-

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (No Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Student Effort – Complexity & Scope	Photography work lacks technical or creative challenge. Minimal variation in techniques or subject matter.	Work demonstrates moderate technical skill in composition, lighting, or subject matter. Scope is appropriate but not highly challenging.	Work demonstrates significant technical skill through advanced composition, camera and subject setup, and editing.	Work demonstrates exceptional skill and ambition. Multiple advanced photographic techniques, editing, or conceptual approaches are successfully executed with strong artistic intent.	
Originality – Original Concept	Images rely on common ideas, clichés, or heavily repeated compositions with little originality or personal vision.	Images show some original interpretation or variation of familiar photographic themes.	Images demonstrate a distinctive concept with clear personal vision and creative interpretation of subject matter.	Images demonstrate exceptional originality and conceptual depth. Work is highly unique, memorable, and reflects a strong individual artistic voice.	
Creativity – Visual/Aesthetic Impact	Images lack visual appeal, balance, or emotional impact. Composition or editing may detract from subject matter.	Images are visually acceptable with basic composition and lighting. Aesthetic quality supports the subject but is not strongly impactful.	Images are visually engaging, well-composed, and demonstrate strong control of lighting, color, and subject placement. Aesthetic choices enhance meaning.	Images demonstrate exceptional visual impact and artistic excellence. Composition, lighting, and subject matter combine to create powerful, memorable photographic work.	
Craftsmanship – Technical Execution	Significant technical flaws are present such as poor focus, exposure issues, noise, motion blur (unintended), or weak post-processing.	Images are generally technically sound with minor issues in exposure, focus, or editing that do not significantly impact quality.	Images demonstrate strong technical execution with accurate camera and subject setup. Strong technical skills were applied during post-processing.	Images reflect professional-level photographic execution with exceptional control of camera setup and editing techniques.	
SUBTOTAL (50 points)					
Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations. (A) Submitted in an incorrect format (B) Exceeds Time Limits or Project Size limits (C) Student or School Name on Project (this does NOT include names of file attachments) (D) Event Specific Rules					Indicate the Rule Violated:
TIER I SUBTOTAL (50 points)					
Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little or no evidence of planning, visual research, composition study, or concept development. Image choices appear random or unsupported.	Basic planning is evident. Some consideration is given to subject matter, composition, lighting, or theme. Limited research supports creative decisions.	Planning and research clearly influence photographic decisions. Consideration of composition, lighting, subject matter, and storytelling is evident and intentional.	Extensive planning and visual research guide all photographic decisions. Strong understanding of photographic theory, visual storytelling, and composition is clearly demonstrated and well documented.	
Student Effort – Skill Application & Revision	Limited evidence of technical skill application during setup and/or post-processing refinement. Few edits, revisions, or setup improvements are documented.	Appropriate photography skills are demonstrated. Some editing and setup refinement were used to improve image quality and composition.	Strong Principles of Photography and editing skills are consistently applied. Multiple decisions made demonstrate thoughtful improvement in exposure, composition, color, and clarity.	Exceptional mastery of Principles of Photography and post-processing is evident. Refinement is deliberate and significantly enhances artistic quality and technical precision.	
Originality – Creative Problem Solving	Photographic challenges (lighting, framing, subject limitations) are poorly addressed or ignored.	Practical solutions address common photographic challenges such as lighting or composition constraints.	Creative solutions effectively overcome photographic challenges and enhance storytelling, composition, or visual impact.	Innovative solutions demonstrate exceptional creative and technical problem-solving. Challenges are transformed into strengths that enhance artistic expression and impact.	
Creativity – Innovation & Use of Design Principles	Limited application of photographic principles such as rule of thirds, leading lines, depth, contrast, or exposure control. Little innovation is evident.	Basic photographic principles are applied appropriately. Some creative techniques or compositions are included.	Photographic principles are effectively applied to enhance composition, storytelling, and visual interest. Innovation strengthens the final image.	Photographic principles are expertly applied and intentionally manipulated. Innovation is substantial, resulting in highly compelling and visually sophisticated imagery.	
Craftsmanship – Attention to Detail & Presentation	Images show inconsistent editing, poor cropping, distracting elements, or weak presentation quality. Final presentation is unpolished.	Most images are properly setup, edited and presented. Minor inconsistencies or distractions may be present.	Strong attention to detail is evident in setup, editing, and presentation. Images are polished and cohesive.	Exceptional attention to detail is evident throughout. Images are professionally setup, edited, consistently styled, and highly refined.	
TIER 2 SUBTOTAL (50 points)					
(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)					Total (100 points)
Judge Comments: Internal Comments:					

UNIQUE TO TEXAS PROJECTS WOOD

2026 & 2027 OFFICIAL RATING FORM

Judges: Using the descriptions in the rubric for minimal, average, above average, and exemplary as a guide, record the scores earned for the event criteria in the column spaces to the right. Please reserve the maximum point value for projects where no improvement could be made in that area. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: a score of 7 for an X1 criterion = 7 points; a score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met, for example if not paperwork was submitted, they should have a score of zero.

Go/No Go Specifications

* Before Judging the entry, ensure that the items below are present; indicate if an item is missing, leave the box next to the item blank and place a checkmark.
* If a check is placed in RUBRIC IS NOT, the entry is not judged and is re-evaluated.

- ☐ The Project is submitted in the appropriate classification
- ☐ There are no copyright violations
- ☐ School appropriate Content (Drugs, Drug Paraphernalia, Weapons, Alcohol, Sex, Gangs, Tobacco, Cults, or other Violence)
- ☐ Project documentation is present.
- ☐ Rubric is NOT available

TIER I					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Completeness of Documentation	The project is missing most required documentation according to the category's requirements.	The project has some required documentation according to the category's requirements. Documentation may be present but lacking in detail.	The project has all the required documentation according to the category's requirements. Documentation describes the design process and skills used to create the project. Sources are cited.	The project has all the required documentation according to the category's requirement. Documentation details the design process and skills used to create project. Sources are cited.	
Complexity & Scope	Project demonstrates limited complexity. Construction techniques and design requirements are basic. Project scope is narrow with minimal challenge.	Project includes moderate complexity and requires several manufacturing processes or skills. Scope is appropriate but not highly challenging. Some evidence of technical difficulty is present.	Project demonstrates significant complexity through advanced techniques, multiple processes, or intricate design requirements. Scope exceeds basic expectations. Student successfully addresses challenging manufacturing tasks.	Project demonstrates exceptional complexity and ambition. Multiple advanced manufacturing processes, techniques, or systems are integrated successfully. Scope significantly exceeds expectations for the event level. The project reflects substantial effort, persistence, and technical challenge.	
Original Concept	Project closely resembles existing products or common designs with little originality.	Some original features or modifications are evident.	Project demonstrates a distinctive concept with clearly identifiable original elements.	Project exhibits exceptional originality and independent thinking throughout all aspects of the design.	
Visual/Aesthetic Impact	Appearance is unfinished, inconsistent, or lacks visual appeal. Little consideration is given to aesthetics. Design elements appear disconnected or uncoordinated.	Project is visually acceptable and functional. Basic aesthetic considerations are evident. Design elements generally work together.	Project demonstrates strong visual appeal and cohesive design. Aesthetic choices enhance the overall presentation and user experience. Design elements create a polished appearance.	Project exhibits exceptional visual impact and artistic quality. Design is highly engaging, balanced, and professionally executed. Aesthetic decisions significantly elevate the overall project.	
Technical Execution	Significant flaws in construction, assembly, fabrication, or functionality are evident.	Construction is generally sound with minor defects; project functions as intended.	Construction demonstrates precision, consistency, and strong technical skills.	Technical execution reflects professional-level workmanship with exceptional precision and quality.	
SUBTOTAL (50 points)					

Rules Violations (a deduction of 20 points). Record the reason for deduction in the space to the right. Leave the space BLANK if there are NO rules violations. (A) Submitted in an incorrect format (B) Exceeds Time Limits or Project Size limits (C) Student or School Name on Project (this does NOT include names of file attachments) (D) Event Specific Rules	Indicate the Rule Violated:	

TIER I SUBTOTAL (50 points)					
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Tier II					
CRITERIA	Minimal (0-3)	Adequate (4-6)	Above Average (7-9)	Exemplary (10)	
Documentation – Planning & Research	Little or no evidence of research or planning. Design decisions appear random or unsupported. Materials, processes, and design choices are not justified.	Basic planning notes and some research are present but lack detail or a clear connection to the final product. Basic planning and research are evident. Some consideration is given to materials, methods, and design requirements. Limited evidence supports decision-making.	Research clearly influenced design and manufacturing decisions. Planning includes material selection, manufacturing processes, safety considerations, and project requirements. Evidence shows thoughtful preparation before construction began.	Extensive research and planning are evident throughout the project. Multiple sources, design considerations, testing, and analysis informed decision-making. Planning demonstrates a strong understanding of manufacturing principles and project objectives.	
Student Effort – Skill Application & Revision	Limited evidence of skill development or refinement. Few manufacturing skills are demonstrated. Little or no evidence of revisions or improvements.	Appropriate manufacturing skills are demonstrated. Some adjustments or improvements were made during development. Student demonstrates competency with selected processes.	Strong technical skills are applied throughout the project. Multiple revisions, improvements, or refinements are documented. Student demonstrates adaptability when challenges arise.	Exceptional skill mastery is demonstrated throughout the project. Revisions are deliberate, documented, and result in measurable improvements. Student demonstrates continuous evaluation, refinement, and improvement during the project lifecycle.	
Originality – Creative Problem Solving	Challenges are not effectively addressed. Solutions are simplistic or incomplete. Limited evidence of critical thinking.	Common challenges are addressed with practical solutions. Some evidence of thoughtful decision-making is present. Problem-solving supports project completion.	Creative solutions effectively address design and manufacturing challenges. Decision-making demonstrates analysis and critical thinking. Solutions improve project functionality, appearance, or manufacturability.	Innovative and highly effective solutions address complex challenges. Problem-solving demonstrates exceptional creativity and technical reasoning. Solutions substantially improve project performance, efficiency, or quality.	
Creativity – Innovation & Use of Design Principles	Design principles are poorly applied or absent. Project relies on standard approaches with little innovation.	Basic design principles are applied appropriately. Some innovative elements are incorporated. Design supports project objectives.	Design principles are intentionally and effectively applied. Innovation enhances functionality, aesthetics, or manufacturability. Design demonstrates thoughtful integration of form and function.	Design principles are expertly utilized throughout the project. Innovation is substantial and meaningful. Project demonstrates exceptional creativity through both design and execution. Form, function, and user experience are seamlessly integrated.	
Craftsmanship – Attention to Detail & Presentation	Noticeable flaws, rough areas, or unfinished elements are present. Project presentation lacks organization or professionalism. Details are inconsistent or overlooked.	Most details are completed satisfactorily. Presentation is organized and appropriate. Minor imperfections are present but do not detract significantly.	Strong attention to detail is evident throughout the project. Finishes, assembly, labeling, and presentation are polished and professional. Few imperfections are visible.	Exceptional attention to detail is evident in every aspect of the project. Finishes are flawless or nearly flawless. Presentation is highly professional and competition-ready. Every component contributes to a superior overall impression.	
TIER 2 SUBTOTAL (50 points)					

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	Total (100 points)				
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Judge Comments:	
Internal Comments:	

Forms

Bill of Materials Form

Texas TSA Documentation Form

Texas TSA Liability Release Form

UTE Photo Release

UTE Project AI Reflection



TEXAS TSA BILL OF MATERIALS FORM

Event #:

Chapter #:

National TSA Student ID:

Bill of Materials:

Material Description	Dimensions	Quantity	Estimated Cost
ESTIMATED TOTAL PROJECT COST:			



TEXAS TSA PROJECT DOCUMENTATION

EVENT #:

EVENT NAME:

CHAPTER #:

STUDENT'S NATIONAL TSA MEMBER ID #:

Process Description:

In the following box, describe the process you used to complete this project.

In the following box, describe changes or revisions made during the design process of the project or challenges that were overcome.

In the following box, describe the technical skills or learning gained in the development of the project.

In the following box, list all of the equipment and/or software used in the development of the project.

Copyright Certification:

I hereby certify that all content contained in this work is either:

1. Original work created by me, or
2. Used with proper authorization, license, or permission from the respective copyright holder, or
3. Used in compliance with applicable copyright laws, including fair use where applicable.

I affirm that this work does not knowingly infringe upon the intellectual property rights, copyrights, trademarks, or proprietary rights of any third party. All sources used for reference, inspiration, or research have been appropriately credited where required.

I take full responsibility for ensuring the accuracy, originality, and lawful use of all materials included in this work. I understand the importance of representing the information truthfully and acknowledge that any misrepresentation could have consequences that impact the placement or advancement of myself and my chapter.

_____ **Student Initials** _____ **Advisors Initials**

(Complete the Professional Citation at the end of this form. If all work is original to the student state that on the citation page)

AI Certification

AI Use on project (check one):

- ☐ No AI was used in the development of or creation of this project.
- ☐ Generative (used AI to create text, images, or other content)
- ☐ Informative (used AI to research or gather information)
- ☐ Both
- ☐ Other: _____

_____ **Student Initials** _____ **Advisors Initials**

(If AI was used in the planning, development, or creation of this project, complete the AI reflection page at the end of this form. If no AI was used, do not include the AI reflection form with this document)

Photo/Film/Video Consent and Release

Check one:

- ☐ No images of people were used in this project
- ☐ A consent form from all identifiable people whose images were used in this project is attached to this form.

_____ **Student Initials** _____ **Advisors Initials**

(Attach a consent form for everyone who has a recognizable image in the project. If there are no images of people involved in the project, do not include the release forms in your project)

Professional Citations: Using a standard professional format, cite all resources used in the development of this project. If no resources were used, state so on this page.

Personal Liability / Medical Release / Photograph Release

Name _____ Home Telephone _____

Home Street Address _____ City/State/Zip _____

Date of Birth _____ Advisor _____

School _____

School Street Address _____

City/State/Zip _____ Telephone _____

MEDICAL INFORMATION (children and students only)

1. Allergies (drug or otherwise) _____

2. Current medication _____

3. Describe any history of heart condition, diabetes, asthma, epilepsy, or rheumatic fever, etc.

4. Physician's name Physician's telephone _____

"I hereby agree to release the Texas Technology Student Association, its representatives, agents, servants and employees from liability for any injury to above named person at any time while attending the Texas TSA Activity, including travel to and from the conference, excepting only such injury or damage resulting from willful acts of such representatives, agents, servants, and employees."

"I do voluntarily authorize the Texas Technology Student Association's local chapter advisors, state advisor, assistants and/or designees to administer and/or obtain routine or emergency medical treatment for the above-named person as deemed necessary in medical judgment."

"I agree to indemnify and hold harmless the Texas Technology Student Association and/or assistants and designees for any and all claims, demands, actions, rights of action, or judgments by or on behalf of the above named person arising from or on account of said procedures or treatment rendered in good faith and according to accepted medical standards."

"I hereby authorize any physician member of the Department of Emergency Medicine of an accredited hospital or any member of the medical staff of an accredited hospital to render medical treatment, which in his/ her judgment is deemed necessary in the care of the above named person (child or student) while attending the Texas TSA Activity, including time traveling to and from the conference."

"I permit Texas TSA to use video footage and photographs of my child for publicity that might include but is not limited to: website, PowerPoint presentations, promotional videos, flyers or news publications."

Signature of parent or guardian (if child or student)

Date

Participant's or advisor's signature

Date

A COPY OF THIS FORM MUST BE KEPT BY THE STATE AND CHAPTER ADVISORS AT THE EVENT AND GIVEN TO APPROPRIATE MEDICAL AUTHORITIES IN THE EVENT OF A MEDICAL EMERGENCY.

PHOTO/FILM/VIDEO CONSENT AND RELEASE

I hereby give permission for images of my child or myself (as applicable), captured during Technology Student Association

(TSA) activities through film, photo or digital camera, to be used solely for the purposes of TSA promotional materials and publications, and I waive any rights of compensation or ownership thereto.

Name of Minor in Images (please print)

Name of Minor's Parent/Guardian (please print)

Name of Adult in Images (please print)

Parent/Guardian or Adult's Signature (as applicable)

Date

AI Reflection:

AI Tool(s) Used: Name the specific AI tool(s) you used.

What specific role did you use AI for (e.g., brainstorming, research support, drafting, debugging)?

How did you ensure that the final work represents your own ideas, understanding, and creativity rather than AI-generated content? How did you avoid over-reliance on AI or using it in a way that could be considered unethical?