



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.

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	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	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