



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
----------------------	---------

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 #
-------	---------

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