

Region 5 PA-TSA Leadership Conference
January 16th, 2027
Downingtown STEM Academy
Update on 10/12/2026

Please continue to refresh the read, read, read ... this is a living document, and the conference team may need to make adjustments as we continue planning the conference.

HIGH SCHOOL EVENTS

Please carefully review the information below regarding competitive events for the upcoming Regional Conference. Changes have been made to the following events to ensure the Conference can be completed and judged in the allotted time.

For specific rules (example: Pre-Conference C.1, a - h; Preliminary Round A.1 or Semifinal A-D) ... Please refer to the Regulations and Requirements section of the National Rules for what needs to be included.

All Documentation Portfolios MUST be submitted as PDF and labeled as eventname_RegionalIDNumber

Early Submission Link:
Early Submission Date is:

Event	Early Submission	Onsite	Other Notes
Architectural Design 3 Teams	Walk-through demonstration video URL Documentation portfolio	Study Models Top 12 Semifinal Round	
Audio Podcasting 3 Teams	Audio Podcast Documentation Portfolio	Top 12 Semifinal Round	The audio podcast link must point directly to the team's entry. Entries requiring a software download or a request for access will not be judged.

Biotechnology Design 3 Teams		Interactive Display Documentation Portfolio Semifinalist Presentation/Interview - Dependent on # of Entries	
Board Game Design 3 Teams		The Packaging and Board Game Documentation Portfolio Semifinalist Presentation/Interview - Dependent on # of Entries	Incomplete games should still be submitted.
CAD Architecture 4 Individuals		Challenge on-site that will consist of designing a “building.” 2 hours to complete the challenge No interview	Must bring your own computer. Computers are the responsibility of the student. Judged on-screen. Judges are not responsible for any lost, broken, or stolen material. No Wi-Fi will be available for HS CAD events. You can use a personal hotspot, but connections are not going to be guaranteed. (National rule)

CAD Engineering 4 Individuals		Challenge on site that will consist of recreating a part(s) and drawings 2 hours to complete the challenge No interview	Must bring your own computer. Computers are the responsibility of the student. Judged on-screen. Judges are not responsible for any lost, broken, or stolen material. No Wi-Fi will be available for HS CAD events. You can use a personal hotspot, but connections are not going to be guaranteed. (National rule)
Chapter Team Written 6 Individuals	Test only at the home location.		
Children's Stories 3 Teams		Storybook Documentation Portfolio Semifinalist Presentation/Interview - Dependent on # of Entries	Incomplete books and printed colored copies should still be submitted. No need for professional binding.

Data Science and Analytics 3 Teams	Documentation Portfolio PDF of Scientific Poster included in Portfolio	Top 12 On-site presentation of digital poster.	
Debating Tech 2 Teams		Onsite Debate	Pre-debate meeting time will be published on the day of the schedule
Digital Video Production 3 Teams	Documentation Portfolio Video	Top 12 Semifinal Round	URL must lead directly to the participant's entry. Entries that require a software download or a request that access be granted will not be judged.
Dragster 7 Individuals		Dragster Documentation	All cars passing a safety inspection will be raced at least one time.

Engineering Design 3 Teams		Documentation Portfolio Free Standing Display Prototype/model of the solution Semifinalist Presentation/Interview - Dependent on # of Entries	
Extemporaneous Speech 2 Individuals		Sign up for presentation time	
Fashion Design and Technology 3 Teams		Wearable Prototype Patterns Documentation Portfolio Semifinalist Presentation/Interview - Dependent on # of Entries	
Flight Endurance 3 Individuals		Documentation Portfolio Flight Box and Model	Submit the portfolio and plane when signing up for flight time. Trimming time and test flights will be required between 8:30 and 10. All planes and portfolios should be picked up during flight time.

Forensic Science 4 Teams	Off-site test	Top 10 Onsite Challenge	Teams will need to provide their own toolboxes Recommended Kit
Future Technology and Engineering Teacher 2 Individuals	Portfolio	Semifinal Round Presentations	Only those who turn in early submissions will be allowed to participate in the onsite portion. Must bring your own computer. A projector will be available if needed. Must have an HDMI hookup or adapter. The board may not be interactive. Each student is responsible for ensuring their laptop can connect to the projector using a standard HDMI connector.
Hybrid Racer XL 4 Individuals		A dual-powered model car Showcase display Documentation Portfolio Time trials	All racers passing a safety inspection will be raced at least one time.

Interior Design 3 Teams		Design Boards Documentation Portfolio Semifinalist Presentation/Interview - Dependent on # of Entries	
Manufacturing Prototype 3 Teams		Documentation Portfolio Packaging Prototype of the Product Semifinalist Presentation/Interview - Dependent on # of Entries	Each team will have 10 minutes with the judges
Music Production 3 Teams	Recorded Musical Piece Documentation Portfolio	Top 12 Semifinal Round	The URL to the musical piece must point directly to the file and not require any permissions or installation of software for evaluation.
PA- Logo Design 2 Individuals			

PA - Medical Technology 3 Teams	Documentation Portfolio w/ Digital Scientific Poster as ONE (1) PDF		
Photographic Technology 4 Individuals	Photographic Portfolio PDF		
Prepared Presentation 2 Individuals		Sign up for presentation time	A projector will be provided. Each student is responsible for ensuring their laptop can connect to the projector using a standard HDMI connector.
Promotional Design 4 Individuals	Promotional Design Portfolio PEF		

Robotics 3 Teams		Robot Challenge	
Software Development 3 Teams	A copy of the solution's code (URL or PDF) and Resources and AI Reflection PDF	Software Demonstration	<p>Only those who meet the pre-submission deadline will be allowed to present.</p> <p>Students will have 7 minutes for the presentation.</p> <p>Bring your own hardware. No wifi or internet connection will be available. Can use a personal hotspot, but we can not guarantee a connection</p>
STEM Mass Media	Video News Story Documentation PDF		
Structural Design and Engineering 5 Teams		Structures MUST be pre-built and turned in on-site with all accompanying documentation and box	All legal structures will be physically tested.

Technology Bowl - TEAM 3 Teams	Test only at the home location.		
Technology Problem Solving 2 Teams		Onsite Challenge	Bring your own tools and materials according to the rules.
Transportation Modeling 2 Individuals		Scale Model Display Documentation Portfolio	
Video Game Design 3 Teams	Video Game URL Video Game Demonstration Video URL Documentation Portfolio	Top 12 Semifinal Round	The URL must point to the team's entry. Entries that require a software download or a request that access be granted will not be judged.

Vlogging	Video Series URL Documentation Portfolio PDF		
Virtual Reality Visualization 3 Teams	Documentation Portfolio Recording of the Visualization	Top 12 Semifinal Round	Submit Visualization via early submission link (no usb)
Webmaster 3 Teams	Website URL	Top 12 Semifinal Round	A “broken” URL link will be disqualified.