

TSA MISSION

The Technology Student Association (TSA) enhances personal development, leadership, 21st century skills, and career opportunities in STEM, whereby members apply and integrate these concepts through intra-curricular activities, competitions, and related programs.

WHO ARE TSA MEMBERS?

TSA is devoted exclusively to the needs of students engaged in science, technology, engineering, and mathematics (STEM). Open to those who are enrolled in or who have completed technology and engineering courses, TSA has 300,000 middle and high school student members across the country. TSA is supported by educators, parents, and business leaders who believe in the need for a technologically literate society. TSA members learn through exciting competitive events, leadership opportunities, and membership activities. It is the intent of TSA to involve as many different TSA members as possible in competitive events and provide recognition in a setting of fair play practices using TSA event guidelines.

Explore what TSA has to offer by using this guide and by visiting TSAweb.org for information. With competitive events that range from video game design to structural engineering and much more, there is something to capture the imagination of—and bring out the best in—all students. We hope that with teacher guidance, students will enjoy the challenge of TSA's competitive events at local, state, regional, and national TSA conferences.

The competitions in this guide support a broad spectrum of goals by enhancing STEM curriculum, emphasizing and promoting the development of leadership and 21st century skills, and increasing exposure to future career choices.

THE ROLE OF COMPETITIVE EVENTS

To follow its mission, TSA offers stimulating competitive events. TSA believes that by participating in thoughtfully designed competitions, students learn 21st century skills such as collaboration, perseverance, critical thinking, and problem solving, thereby becoming “winners”

irrespective of placement in a competition. Many teachers find that TSA's competitive events provide an excellent motivational tool in the academic environment.

Every two years, TSA's competitive events are reviewed and revised by subject matter experts (SMEs) in the Competition Regulations Committee (CRC), a standing group of technology and engineering educators with hands-on classroom experience. The *Technology Student Association (TSA) High School Competitive Events Guide for the 2025 & 2026 National TSA Conferences* is the result of the collaboration of CRC managers, competitive event coordinators, teachers, proposals of numerous TSA state and chapter advisors, and students who make TSA competitive events current and dynamic. The guide presents rules and regulations for all National TSA Conference competitive events; a view of each event's connection to STEM standards; and suggested careers. Relevant for all levels of competition (state delegations may choose to adopt the national guidelines for state-level competitions), the guide provides an excellent motivational tool for curricular study and activities in the classroom.

ABOUT THIS GUIDE

With the publication of the *2025 & 2026 TSA High School Competitive Events Guide*, come the following changes:

1. The format of this guide has been streamlined to familiarize competitors and advisors with the TSA Conference General Rules and Regulations, and the procedures, regulations, and assessment for each event.
2. General rules that apply to all participants across every competitive event are no longer identified in each competition's regulations. Therefore it is critical, and a personal responsibility of each competitive event participant and advisor, to read and fully adhere to the TSA Conference General Rules and Regulations. As an example, should a competitive event require a test to be taken, there is no longer a specific reminder in the event guidelines for participants to bring their own pencil to the event.
3. Some event's guidelines have been revised in some form, whether in content or in format.

COMPETITIVE EVENTS PROGRAM



LEVELS OF COMPETITION

- A. The breakdown of grades noted below is used to designate levels for competition entries. Each level has its own unique competitive events guide.
- Middle School/Junior High School level—Grades 5, 6, 7, 8, 9
 - High School level—Grades 9, 10, 11, 12
 - Ninth graders must compete at the level in which the chapter affiliates.
 - If the configuration of the school includes grades 9-12, ninth grade students must compete in high school events.
 - If the configuration of the school includes grades 6-9 or 7-9, ninth grade students must compete in middle school events.
- B. If the school has a K-12 configuration, or a configuration other than the examples above, national TSA should be contacted for clarification and approval regarding the appropriate school level designation.

GENERAL RULES AND REGULATIONS

NOTE: General rules and regulations apply to *all* competitive events and are *in addition* to each event's specific guidelines.

A. Affiliation and Membership

1. TSA members, advisors, and chapters must be currently affiliated with TSA to enter any competitive event.
2. TSA membership rights extend through the year of graduation.
3. Students who graduate mid year may compete at the national conference that immediately follows their end-of-year graduation.

B. Conference Registration, Attendance, and Participation in Events

1. Individuals who wish to attend the conference must complete conference registration.

2. Students must be registered and be in attendance with an adult chaperone at the National TSA Conference in order to enter and become a semifinalist or finalist in any event.
3. All adult advisors, chaperones, and student participants must be in attendance for the entire conference.
4. National TSA Conference registrants must wear conference identification badges at all times.
5. The TSA competitive event limit is six (6) events per conference participant—individual and team events combined.
6. Team events:
 - a. All team members must be affiliated with the same chapter.
 - b. Registration for any team competitive event requires the identification of all team members. A (one) team captain must be designated by the chapter advisor for any of the events with online submission requirements. The captain is responsible for uploading the competition entry/documentation on behalf of the entire team. Team captain responsibility does not apply for team events that involve a preliminary exam; all team members must take an exam to determine an average team score.
 - c. Unless otherwise designated in a competition's eligibility guideline, the maximum size of a team is six (6) members.

C. Student Responsibilities for Competitions

1. It is the individual responsibility of each participant to obtain all rules and guidelines for competitive events.
2. Lack of knowledge or understanding about a particular event is neither reason nor excuse for an individual to request an accommodating adjustment or change.
3. Students and advisors must routinely check the TSA website, [TSAweb.org](https://www.tsa.org), for updated information about TSA general rules and competitive event guidelines.

4. Students who participate in any TSA competitive event are responsible for knowing all updates, changes, and clarifications related to that event.
5. Student competitors are responsible for ensuring that all competition-related websites and internet-based content are accessible from their device (personal or school-issued). TSA assumes no responsibility for a student competitor's inability to access national TSA conference competition platforms and/or web-based content.

D. Competition Entries

1. Entries must be started and completed during the current school year.
2. Entries may be submitted for one (1) year, and one (1) competition only. An infraction of this rule results in disqualification.
3. Each participant/team shall submit only one (1) entry per event.
4. All entries that require the onsite submission of a documentation portfolio must be secured in a clear front report cover unless otherwise indicated in an event's regulations (View a [sample report cover](#)).
5. All entries must be in English.
6. Participants must check in and pick up their event entries at the times and places stated in the conference program, or as announced during the National TSA Conference.
7. Testing, for events that include a test according to the current Middle School and High School Competitive Events Guides, may be administered online only at the national TSA conference. Written (paper) tests may not be available.
8. Individual participants, or each team member, must bring:
 - a. One (1) laptop or tablet capable of networking via Wi-Fi, and running solely on battery power for up to two (2) consecutive hours. Google Chrome is the preferred browser.
 - b. Optional: One (1) mouse
 - c. External keyboards and monitors are not permitted
9. For any competition that involves the use of a pencil (e.g., for producing required sketches),

participants must provide—and bring to the competition site two (2) pencils, either:

- sharpened standard #2/HB grade with an eraser, or
- #2 mechanical with an eraser

10. Entry content:

- a. National TSA provides guidelines for individual and team entry content but does not bear responsibility for content choices made by participants.
- b. Entries are evaluated on the basis of an event's official rating form.

11. Projects and/or products:

- a. Unless otherwise specified, no identifying information—other than a student or team ID#—is to be included on an entry.
- b. Exceptions to this rule are:
 - i. Middle school competitive events:
 1. Career Prep
 2. Children's Stories
 3. Community Service Video
 4. Construction Challenge
 5. Structural Engineering
 - ii. High school competitive events:
 1. Architectural Design
 2. Audio Podcasting (student first name[s] only may be used)
 3. Children's Stories
 4. Digital Video Production
 5. Structural Design and Engineering
 - iii. Events that require submission of a Work Log shall include indication of student initials only.
- c. Unless otherwise noted, for all events that require a display, the size of the display may not exceed 15" deep x 2.5' wide x 4' high.

12. TSA may choose to keep National TSA Conference student entries.
 - a. Such entries may be used by national TSA for promotional purposes. Should that occur, credit for any such entry would be noted by TSA.
 - b. If applicable, the USB flash drive entries will become the property of TSA and will not be returned.

E. Citations, References, and Copyrighted Material

1. For all applicable competitive events, citations/references must follow a professional citation style of the competitors choosing unless the competitive event specifies a specific formatting style. Failure to use a professional citation style will result in a rules violation of twenty percent (20%). Some examples of professional citation styles include MLA, APA, Chicago, and IEEE.
2. All entries must be the original work of the student participant or student team.
3. All ideas, text, images (including those labeled “for reuse”), and sound from other sources must be cited.
4. If copyrighted material is used, written permission must be included.
 - a. An internet search about copyrighted material and copyright fair use is recommended if ideas, text, images, or sound from other sources are incorporated into an event entry.
 - b. For information about the use of the TSA logo, refer to the TSA Branding Guide in the Student Member Site.
5. TSA Honor Statement for Competitive Events:
 - a. All work must be created and completed by individual competitors or teams. Plagiarism, the use of Generative Artificial Intelligence (GenAI) software, copyright violation, cheating, and falsification of information are prohibited.
 - b. Participants may NOT use any generative artificial intelligence (GenAI) tools (e.g. ChatGPT, Google Gemini, GitHub Copilot, etc.). Any attempt to gain an unfair advantage will not be tolerated.

- c. Competitors at any level of TSA competition understand and agree to abide by the TSA Honor Statement.
- d. If it is determined that a student violated the TSA Honor Statement, a rules violation of twenty percent (20%) will be incurred.

F. Prohibited Materials, References, and Images

1. Hazardous materials, chemicals, lighted or open flames, combustibles, wet cell batteries, and other similar substances are not allowed at the national TSA conference.
2. Competition entries or presentations by participants must not include racial or ethnic slurs/symbols, reference to gang affiliation, or vulgar, violent, subversive, or sexually suggestive language or images.
3. Entries or presentations may not promote products that students may not legally buy, such as tobacco, alcohol, or illegal drugs.
4. Images of guns, knives, or other weapons are prohibited.
5. The Entertainment Software Rating Board (ESRB) provides industry guidance on the content of video games and/or applications. Please refer to the [ESRB overview](#) for the categories, descriptions, and elements of video content that may be included in competition entries.
6. Interpretation of the content of competition entries is at the discretion of the judges. Failure to follow any of the above procedures may result in disqualification.

G. TSA Liability

1. TSA is not responsible or liable for any personal property, equipment, or materials brought to the National TSA Conference for use by a participant or attendee.

H. Event Scheduling Conflicts

1. When an event scheduling conflict could prevent an individual from participating in an event, the individual has the right to not compete in an event.

I. Emergencies

1. Team member substitution may be allowed should a documented emergency arise in team events that involve written and semifinalist segments. All substitutions must be approved by the event manager and coordinator.

J. Event Judging

1. All events are judged in accordance with the stated event criteria noted in this competitive events guide.
2. Tier scoring has been implemented in the preliminary round of some events and is intended to streamline the evaluation process used to determine semifinalists.
3. The decisions of judges related to competitive events are final.

K. Procedure for filing a grievance with the Rules Interpretation Panel

The Rules Interpretation Panel (RIP), a group made up of at least three (3) CRC members, monitors and oversees the competitive events during the National TSA Conference. The panel provides a means by which state advisors may express grievances and concerns about conference situations that pertain to events, and it ensures continuity from year to year for competitive event rules and regulations.

1. All concerns must be in writing using the correct form in the guide. The Rules Interpretation Panel Grievance form (see Forms Appendix) must be completed in its entirety.
2. Only state advisors may submit a request to the Rules Interpretation Panel (RIP) at the national conference. Should an individual/team/chapter advisor have a concern about an event, the state advisor shall be the point of contact. National TSA will not accept forms from anyone other than the state advisor.

3. During the conference, the RIP panel will meet to discuss and analyze the advisor's concern.
4. It is the intent of the panel to resolve any grievances at the conference with a written response to the state advisor.
5. Only the state advisor may pick up the written response from the RIP panel.
6. All decisions made by the panel are final.

L. Rules Violations and Disqualifications

1. A rules violation that gives a competitor an unfair advantage will result in a twenty percent (20%) deduction of the total possible points in either a preliminary or semifinal round, as applicable.
2. The coordinator or manager of an event has the right to disqualify a competitor when this type of incident occurs.
3. The event coordinator and manager must sign off on both a twenty percent (20%) deduction and a disqualification.

M. Semifinalists

1. Should the competition have a semifinal round, the event will have a minimum of twelve (12) semifinalists.
2. Semifinalists (individuals or teams, as applicable) will compete against one another to determine the top ten (10) finalists in an event.
3. All members of a semifinalist team will participate in the semifinalist portion of an event, unless otherwise noted in the event's regulations.

N. Electronic Devices

1. Recording devices are not allowed in certain competitive events.
2. CRC manager and event coordinator approval is required before any event may be recorded.
3. All electronic devices—including but not limited to, cell phones, iPads/tablets, electronic readers, smart watches, etc.—*must* be turned off, unless otherwise noted in specific event regulations.
4. No electronic communication devices of any kind are permitted during competition.

COMPETITION REGULATIONS COMMITTEE

The Competition Regulations Committee (CRC) is composed of dedicated STEM teachers and education professionals from across the country who have made major commitments to create and maintain the high quality of national TSA's competitive events. Some CRC members are charged with reviewing TSA's competitive events, updating them as necessary, and presiding over the competitive events at the annual national TSA conference.

Ideas and feedback regarding events are always welcome. Guidelines and forms can be found in the Forms Appendix of this guide for proposing a new event and for suggesting revisions to existing event.

EVENT COORDINATOR REMINDERS

TSA appreciates the support of its event coordinators, many of whom are teachers attending the conference with students from their chapters. The busy schedules of these individuals prompt the reminders that follow.

- A. Competitive event coordinators must be present for a mandatory coordinator's meeting on the first day of the conference.
- B. Competitive event coordinators must be present for conference event check-in and check-out if they are coordinating an event in which these activities take place.
 1. Generally speaking, "check-in" is on the evening of registration day, and "check-out" is held on the day before the awards ceremony.
 2. Tentative schedule information will be available before the conference on the [TSA website](#).
- C. The Competition Regulations Committee, which consists of all the event managers, is available throughout the conference to support coordinators as they supervise competitive events.

AWARDS

At the conference awards ceremony, ten (10) finalists in each event are identified in random order and called to the stage for recognition and to receive a finalist lapel pin. The top three (3) winners in each event receive trophies.

EVENT PROPOSAL INFORMATION

As technology evolves and technology education attempts to keep pace and reflect these changes, new TSA events are added, some are revised, and others are dropped. TSA chapter advisors, state advisors, and others are encouraged to submit proposals for new events.

The following topics reflect potential direction for development:

- 21st century technology
- 3D printing
- Adaptive/Assistive Technology
- Cloud computing
- CoDrone
- Cyber Robotics Coding
- Data management
- Economic development
- Electronic publishing
- Engineering
- Environmental technology
- Fluid power technology
- Future technologies
- Green technology
- Innovative power sources
- Lasers/satellites/radar
- Manufacturing technology
- Mobile apps
- Social media marketing
- Transportation technology

When submitting a proposal for consideration, include these elements:

- Overview (description of the event and participant expectations)
- Eligibility for entry
- Limitations (such as time or entry submission requirements)
- Resource considerations (i.e. Are the resources a limiting factor, or are they affordable/readily available to all populations? Can this be executed at the national level?)
- Specific regulations
- Required personnel
- Alignment with STEM standards

Formative ideas are welcome, but the more complete the proposal the less likely it will be misinterpreted. The Competition Regulations Committee (CRC) acknowledges all submissions, and each is given consideration for possible inclusion in a competitive events guide. Once submitted, ideas and events become the property of national TSA. Proposals must be submitted by July 1 of first conference year of the current guide in order to be considered for the next guide.

Find the form in the Forms Appendix of this guide. Proposals must include the submitter's name and complete contact information. Proposals may be mailed to CRC, c/o National TSA, 1904 Association Drive, Reston, VA 20191-1540, or emailed in a Word file attachment to general@tsaweb.org.

NATIONAL TSA CONFERENCE DRESS CODE AND OFFICIAL CONFERENCE ATTIRE GUIDELINES

- A. Chapter and state advisors, parents, and chaperones are responsible for seeing that all TSA student members wear TSA competition, general session, or casual attire as occasions may require.
- B. Everyone who is registered for the conference, including parents, guests, and children, must comply with the TSA dress code policy.
- C. TSA attire may be purchased online via the SHOP tab on the [TSA website](#).
- D. Because adults (advisors, parents, and guests) serve as role models at TSA conferences and activities, they are expected to dress appropriately for all TSA occasions they attend.
- E. Students must adhere to the TSA dress code requirements as listed in this section and on the [TSA website](#).
- F. When students compete in any competitive event they must wear competition attire.
- G. Students not in appropriate competition attire when they compete may be allowed to participate in an event, but they will lose twenty percent (20%) of the total possible points per round.

COMPETITION ATTIRE

1. **Shirt:** official royal blue TSA shirt
2. **Pants, or at least knee-length Skirt:** gray
 - *Unacceptable:* jeans; jeggings; leggings; baggy pants; exterior pocket pants; shorts
3. **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

1. **Blazer:** navy blue with official TSA patch
2. **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.

GENERAL SESSION ATTIRE

1. **Shirt:** the official TSA shirt (royal blue) is preferred; button-down shirt or a polo/golf shirt
 - *Unacceptable:* t-shirts; halter tops; tank tops
2. **Pants, or at least knee-length Dress or Skirt**
 - *Unacceptable:* jeans; jeggings; leggings; baggy pants; exterior pocket pants; shorts
3. **Optional Blazer:** navy blue with official TSA patch
4. **Optional Tie:** official TSA tie
5. **Shoes:** dress shoes worn with dark socks, hosiery (optional):
 - open-toed shoes or sandals are acceptable
 - *Unacceptable:* athletic shoes; flip-flops; military boots; or work boots

CASUAL ATTIRE

1. Appropriate t-shirts, shorts, or jeans
2. Casual attire **may not** be worn at competitions or general sessions

Registered parents, guests, and children who are not compliant with General Session Attire and who wish to attend the Awards Ceremony, may be asked to sit in a designated section, if permitted entry.

*Approved by the TSA, Inc. Board of Directors.
The above supersedes any other dress code prior to September 24, 2022.*

PARTNERSHIP FOR 21ST CENTURY SKILLS (P21)

In 2002, the Partnership for 21st Century Skills (now the Partnership for 21st Century Learning, or P21) was founded as a non-profit organization by a coalition that included members of the national business community, education leaders, and policymakers.

21st century skills comprise skills, abilities, and learning dispositions that have been identified as being required for success in 21st century society and workplaces by educators, business leaders, academics, and governmental agencies. This is part of a growing international movement focusing on the skills required for students to master in preparation for success in a rapidly changing, digital society. Many of these skills are also associated with deeper learning, which is based on mastering skills such as analytic reasoning, complex problem solving, and teamwork. TSA's competitive events provide a natural platform to highlight the leadership and 21st century capabilities of students.

TSA's leadership program engages participants to be the best member they can be, as they seek knowledge about themselves, the organization, and their community, while developing and demonstrating leadership and 21st century skills. Leadership and 21st century skills components are all specifically tailored for each individual competitive event, and are evaluated based on the official rules and rubrics.

- For example, in one competitive event team members might note the communication, collaboration, and teamwork skills they used to finalize their idea/design in their Work Log. While in another event, a brief discussion of leadership skills and/or 21st century skills that they developed or demonstrated while working on a project might be highlighted as part of an existing presentation/interview. Criteria will be included in the rubric to evaluate the leadership and 21st century skills documented or demonstrated within these components.

TSA's leadership program features the development of leadership and 21st century skills.

TSA will provide related resources to affiliated chapters through the updated TSA member database. Participation in the TSA competitive events develops leadership and 21st century skills in student members – skills essential for success in the job market.

- There will be other competitive events in which a student/team may naturally demonstrate leadership skills as part of the event. In these events, criteria will be included in the rubric to evaluate the overall leadership and 21st century skills demonstrated.

During the course of preparing for, and participating in a TSA competitive event, participants will study leadership and 21st century skills, and put them into practice. Participants will use the widely accepted leadership and 21st century skills resources, in addition to other resources provided on the TSA website, as they complete the competitive event leadership requirements for all TSA competitions.

TSA believes that acquiring leadership and 21st century skills is critical to the success of young people. The resources found on the TSA website provide TSA advisors with a source for teaching, and students with an opportunity to practice these crucial skills.

TSA's leadership program focuses on the below definitions of leadership and 21st century skills as developed through participation in middle and high school competitions:

Communication: a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior

Collaboration/Social Skills: to work jointly with others, especially in an intellectual endeavor

Initiative: energy or aptitude displayed in initiation of action

Problem Solving/Risk Taking: the process or act of finding a solution to a problem/the act or fact of doing something that involves danger or risk in order to achieve a goal

Critical Thinking (lateral thinking): a method for solving problems by making unusual or unexpected connections between ideas

Perseverance/Grit: continued effort to do or achieve something despite difficulties, failure, or opposition/ firmness of mind or spirit--unyielding courage in the face of hardship or danger

Creativity: the quality of being creative

Relationship Building/Teamwork: work done by several associates with each doing a part but all subordinating personal prominence to the efficiency of the whole

Dependability/Integrity: capable of being trusted or depended on/firm adherence to a code of especially moral or artistic values

Flexibility/Adaptability: characterized by a ready capability to adapt to new, different, or changing requirements

SOURCES

en.wikipedia.org/wiki/21st_century_skills

www.merriam-webster.com/dictionary/dictionary

www.edglossary.org/21st-century-skills

www.nea.org/home/34888.htm

www.lead4change.org/wp-content/uploads/2019/09/L4C_21stCenturySkillsAlignment_12-Track_2020.pdf