2022–2023 Arkansas TSA Events

Any competition that mentions an "annual design challenge" or "annual theme" has details [here](#). The official rules and rubrics for each competition will be available to you once your chapter affiliates.

[High School Competitions Offered](#)
- [Animatronics](#)
- [Architecture Design](#)
- [Audio Podcasting](#)
- [Biotechnology Design](#)
- [Board Game Design](#)
- [Children's Stories](#)
- [Chapter Team](#)
- [Coding](#)
- [Computer-Aided Design (CAD), Architecture](#)
- [Computer-Aided Design (CAD), Engineering](#)
- [Debating Technological Issues](#)
- [Digital Video Production](#)
- [Engineering Design](#)
- [Essays on Technology](#)
- [Extemporaneous Speech](#)
- [Fashion Design and Technology](#)
- [Forensic Science](#)
- [Future Technology and Engineering Teacher](#)
- [Photographic Technology](#)
- [Prepared Presentation](#)
- [Technology Bowl](#)
- [Technology Problem Solving](#)
- [VEX Robotics](#)
- [Video Game Design](#)

[Middle School Competitions Offered](#)
- [CAD Foundations](#)
- [Career Prep](#)
- [Challenging Technology Issues](#)
- [Children's Stories](#)
- [Coding](#)
- [Digital Photography](#)
- [Essays on Technology](#)
- [Prepared Speech](#)
- [Problem Solving](#)
- [Tech Bowl](#)

High School Competitions Offered

Animatronics

To address the annual design challenge, participants exhibit and demonstrate their knowledge of mechanical and control systems by creating an animatronic device with a specific purpose (i.e., communicate an idea, entertain, demonstrate a concept, etc.) that includes sound, lights, and an appropriate surrounding environment (a display).

Architecture Design

In response to the annual design challenge, participants develop a set of architectural plans and related materials, and construct both a physical and computer-generated model to accurately depict their design. Semifinalists deliver a presentation and participate in an interview.

Audio Podcasting

Participants use digital audio technology to create original content for a podcast piece that addresses the annual theme. The podcast must feature high level storytelling techniques, voice acting, and folly sound effects; the full entry must include documentation of the podcast development process and elements. Semifinalists participate in an interview.

Biotechnology Design

Participants select a contemporary biotechnology problem that addresses the annual theme and demonstrates understanding of the topic through documented research, the development of a solution, a display (including an optional model or prototype), and an effective multimedia presentation. Semifinalists deliver a presentation and participate in an interview.

Board Game Design

Participants develop, build, and package a board game that focuses on a subject of their choice. Creative packaging, and the instructions, pieces, and cards associated with the pilot game will be evaluated. Semifinalists set up the game, demonstrate how the game is played, explain the game's features, and discuss the design process.

Children's Stories

In response to the annual theme, participants create an illustrated children's story of artistic, instructional, and social value, and submit documentation related to the development of the physical storybook. Semifinalists read their story aloud and participate in an interview.

Chapter Team

Participants take a parliamentary procedure written test to qualify for the semifinal round of competition. Semifinalists conduct an opening ceremony, items of business, parliamentary actions, and a closing ceremony.

Coding

Participants take a written test, which concentrates on aspects of coding, to qualify for the semifinal round of competition. Semifinalists develop a software program – in a designated amount of time – that accurately addresses an onsite problem.

Computer-Aided Design (CAD), Architecture

Participants use complex computer graphic skills, tools, and processes to respond to a design challenge in which they develop representations of architectural subjects, such as foundation and/or floor plans, and/or elevation drawings, and/or details of architectural ornamentation or cabinetry. The solution to the design challenge and participant answers in an interview are evaluated.

Computer-Aided Design (CAD), Engineering

Participants use complex computer graphic skills, tools, and processes to respond to a design challenge in which they develop three-dimensional representations of engineering subjects, such as a machine part, tool, device, or manufactured product. The solution to the design challenge and participant answers in an interview are evaluated.

Debating Technological Issues

Participants research the annual topic and subtopics and prepare for a debate against a team from another chapter. Teams are instructed to take either the pro or con side of a selected subtopic, submit a summary of references, and use their research to support their assigned position. The quality of a team's debate determines semifinalists and finalists.

Digital Video Production

Participants develop and submit a digital video and a documentation portfolio (including such items as a storyboard, script, summary of references and sources, and equipment list) that reflects the annual theme. Semifinalists participate in an interview.

Engineering Design

Participants develop a solution to an annual theme that is based on a specific challenge noted by the National Academy of Engineering (NAE) in its compilation of the grand challenges for engineering in the 21st century. The solution will include a documentation portfolio, a display, and a model/prototype. Semifinalists deliver a presentation and participate in an interview.

Essays on Technology

Participants are given two hours to write a research-based essay - with citations - using an essay prompt and two (2) or more sources provided onsite. The essay must include insightful thoughts about the current technological topic presented in the prompt.

Extemporaneous Speech

Participants select a technology-related or TSA topic from among three topic cards and prepare and give a three-to-five-minute speech that communicates their knowledge of the chosen topic. The quality of the speech determines advancement to the semifinalist level of competition, for which an identical competition procedure is followed to determine finalists

Fashion Design and Technology

To address the annual theme, participants demonstrate expertise in fashion design principles by creating a wearable garment, garment patterns, and a documentation portfolio. Semifinalist teams present their garment designs (worn by team models), discuss the design process with evaluators, and respond to interview questions.

Forensic Science

Participants take a written test of basic forensic science to qualify for the semifinal round of competition. Semifinalists examine a mock crime scene and demonstrate their knowledge of forensic science through crime scene analysis, with the findings synthesized in a written report/analysis.

Future Technology and Engineering Teacher

Participants research a developing technology, prepare a video showing an application of the technology in the classroom, and create a lesson plan/activity that features the application and connects to the Standards for Technological and Engineering Literacy (STEL), as well as STEM initiatives and integration. Semifinalists demonstrate the lesson plan and answer questions about their presentation.

Photographic Technology

Participants produce a photographic portfolio - demonstrating expertise in photo and imaging technology processes - to convey a message based on the annual theme. Semifinalists have 24 hours to complete a portfolio of photos (with required documentation) taken onsite at the national TSA conference. Finalists are determined based on the quality of the semifinal portfolio, the portfolio presentation, and interview responses.

Prepared Presentation

Participants deliver a three-to-five-minute oral presentation related to the current national TSA conference theme. Both semifinalists and finalists are determined based on the quality of the presentation and the appropriate use and content of the accompanying required slide deck.

Technology Bowl

Participants demonstrate their knowledge of TSA and concepts addressed in technology content standards by completing a written, objective test. Semifinalist teams participate in a question/response, head-to-head, team competition.

Technology Problem Solving

Participants use problem-solving skills to design and construct a finite solution to a challenge provided onsite at the conference. Solutions are evaluated at the end of 90 minutes using measures appropriate to the challenge, such as elapsed time, horizontal or vertical distance, and/or strength.

VEX Robotics

Please see this website for all information. We will be holding a "Skills Only" style event and may consider an "Alliance" style depending upon the number of teams that register.

Video Game Design

Participants design, build, and launch an E-rated online video game – with accompanying required documentation - that addresses the annual theme. Semifinalists participate in an interview to demonstrate the knowledge and expertise they gained during the development of the game.

Middle School Competitions Offered

CAD Foundations

Participants demonstrate their understanding of CAD fundamentals by creating a two-dimensional (2-D) graphic representation of an engineering part or object and answering questions from evaluators about their entry.

Career Prep

Based on the annual theme, participants conduct research on a technology-related career, prepare a letter of introduction to a potential employer, and develop a job-specific resume. Semifinalists participate in a mock job interview.

Challenging Technology Issues

Following the onsite random selection of a technology topic from a group of pre-conference posted topics, participants work to prepare for and deliver a debate-style presentation, in which they explain opposing views of the selected topic.

Children's Stories

Participants create an illustrated children's story based on the annual theme. The entry product is a physical storybook of artistic, instructional, and social value. Semifinalists read their story aloud and participate in an interview.

Coding

To qualify for the semifinal round of competition, participants take a written test that concentrates on computer science and coding. Semifinalists demonstrate their programming knowledge by developing a solution to an onsite coding challenge.

Digital Photography

Participants produce and submit a digital photographic portfolio that relates to the annual theme. Semifinalists participate in an onsite photographic challenge and a presentation/interview.

Essays on Technology

Participants conduct research on specific subtopics from a broad technology area posted as part of the annual theme. Using a previously prepared note card as an approved resource, participants draft an outline of the subtopic randomly selected onsite at the conference. Semifinalists write an essay on that subtopic.

Prepared Speech

Participants deliver a timed speech that relates to the theme of the current national TSA conference. Semifinalists and finalists are determined using the same competition procedure

Problem Solving

Participants use problem-solving skills to design and build a solution to an onsite challenge. Solutions are evaluated using measures appropriate to the challenge, such as elapsed time, horizontal or vertical distance, and/or strength.

Tech Bowl

Participants demonstrate their knowledge of TSA and concepts addressed in technology content standards by completing a written, objective test. Semifinalists participate in a head-to-head, team competition.