



Engineering Design Technology

Oregon State Championships 2021

Review Technical Standards

This contest will follow the “Standards and Competencies” outlined within the SkillsUSA Technical Standards (virtual). Review the contest’s technical standards prior to competing.

Set Up Contest Space and Materials

- The judges will only open the designated items and review only the designated length of videos. Penalties for longer videos in addition to not being fully reviewed.
- This contest will be submitted through videos and dother documentation with no live questioning or presentation.

Complete the Contest

- A contestant team of three will complete a Engineering Design Technology prototype as indicated in the national technical standards with the modifications listed below and will be due in the Championships Hub at 12 noon on Thursday of SLSC.

SCOPE OF THE CONTEST

The team consists of three students, all enrolled in the same educational institution during the current school year. Students may be members of only one team per contest year and may not compete in more than one contest at the national level. High school and college/postsecondary educational institutions are eligible to participate.

The project must be designed and constructed by students who are enrolled in an engineering program or career and technical education program (see definition in the Eligibility section).

Due to COVID restrictions that vary in different schools or regions and since some team members will not be able to meet in person, each team member will have a part of the presentation of a trifold design board explaining the new innovation it collaboratively developed. This must represent the engineering process, detailing brainstorming efforts, schedule, prototypes, modeling, relevant industry regulations, restrictions and laws, safety considerations, manufacturability as is relevant to design. The design board may not be any larger than a 36"x56" tri-fold display. of a video Digital media, such as digital picture frames, can be attached to the design board. The board must be a comprehensive representation of the team’s design process. Each member will record their part of the trifold presentation under the protocols of their learning organization and then the team will submit their presentation of the design board in a single mp4 file, which will not be longer than 5 minutes. (no penalty if the team members are all recorded separately.)

The design prototype must be an accurate reflection of what is being claimed in the oral explanation and presentation.

Importance is placed on the general oral presentation, which lasts no longer than 10 minutes - Engineering Presentation (Powerpoint, Prezi, Google Slides, etc. can be used in this recorded presentation and submitted in a single mp4 file. Any presentation files used in this recorded presentation should be submitted.

Mentorship from the team’s career and technical instructor, academic teachers, and representatives from the business and industry world, including engineers and industrial designers, is highly encouraged.

Complete the Contest Submission

Skill Demonstration

A contestant team of three will complete a Engineering Design Technology prototype as indicated in the national technical standards with the modifications listed above and submitted by the deadline. *Follow the instructions.*

Submit Contest Submission

Submit the following:

- video of presentation not to exceed 10minutes in a single mp4 file.
- Video of presentation of display board not to exceed 5 minutes in a single mp4 file.
- up to 6 jpg files showing the trifold board (must show all of the board)
- up to 10 jpg files showing the prototype
- submit any presentation technology used in presentation (Google Slide, Powerpoint, Prezi etc) for reference for judges. Be sure to only include items/ slides covered in your video.
- One-page typed resume