2025 ASCE Student Symposium

Bridge Design Software Contest

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BRIDGE DESIGN SOFTWARE CONTEST INFORMATION

The bridge design software contest is a competition that aims to provide a platform for civil engineering students to apply their structural knowledge gained in the classroom to practical bridge design scenarios. The contest is designed to be fun, simple, and informative, allowing participants to test their skills and creativity in creating innovative bridge designs.

The Qualifying Round will begin immediately when you receive this information and end on Friday, February 28, 2025, at 11:59pm EST. Each university will be allowed one team with up to two undergraduate students.

The contest will feature participants competing for the lowest total cost of three bridge designs that must pass a simulated load test. One bridge design needs to be prepared and uploaded to the leadership board before the contest with no limitations but just the lowest cost, while the other two designs must be created on the spot during the Final Round. The settings and parameters for these two designs will be provided on the competition day, including the types of bridges, elevations of the bridge deck, and more. Contestants must strategize and execute their designs efficiently to win the challenge.

The leaderboard and contest updates will be posted on the following website:

https://wvbridgedesignandbuildcontest.com/

REGISTRATION REQUIREMENTS:

Register all teams at the official website https://wvbridgedesignandbuildcontest.com/register/ Input your school's name as "Team Name" and select "Open Competition" as the grade. For "School" select "University" and then input your school's name in the "Enter School Name" box. Designate your ASCE Student Chapter Advisor as "Teacher" and the ASCE Chapter President as "Guardian." Select "ASCE Student" for "T-shirt Size" and "County."

BRIDGE SOFTWARE DOWNLOAD:

The Bridge Designer 2025 software (Windows OS) is available for download from the contest website at https://wvbridgedesignandbuildcontest.com/software/ Additionally, the Bridge Designer Software Video Tutorial can be accessed on the same page.

SUBMISSION REQUIREMENTS:

All bridge design files must be uploaded to this website to officially enter the contest. To officially enter the contest, each team must submit at least one bridge design file that passes the simulated load test. You may continue to upload as many design files as possible until the last minute (Friday, February 28, 2025, at 11:59pm EST) to improve the cost and the rank on the leaderboard. Visit https://wvbridgedesignandbuildcontest.com/login/ for more details.

Teams must have a school team name associated with each design.

FILE NAMING CONVENTION:

The application will generate a default file name. The team must change the name before uploading to the website using the following naming convention: "TeamNameXXXX.bdc", where "TeamName" is the school's name and "XXXX" would equal an iteration number of your choice. For tracking purposes, it is suggested to use this number to keep track of your design order, for instance: WVUTECH0001.bdc.

The team's name is a crucial requirement that must be finalized at the outset during the creation of the design on the "Fill in the Title Block" screen. This name should align precisely with the team's registration details to ensure consistency.

NOTE: UPLOADED DESIGNS THAT DO NOT MEET THESE REQUIREMENTS WILL NOT BE ACCEPTED.