

The Nashville Branch of the American Society of Civil Engineers (ASCE) presents...

THE 2018 MUSIC CITY BRIDGE BUILDING COMPETITION



WHAT? The 10th Annual Music City Bridge Building Competition

WHEN? **Saturday, March 3rd, 2018**
Bridge Check-in at 9:00 am, Testing Approximately 10:00 am

WHERE? **Vanderbilt's Laboratory for Systems Integrity and Reliability (LASIR) in Metro Center** (566 Main Stream Drive, Suite 600, Nashville, TN 37228)

WHO? High School Students in Tennessee

- ASCE will provide up to **five bridge kits** for each participating school (Request your bridge kits via email to Mr. Tony Snyder at tonysnyder@comcast.net. Please provide contact information including a mailing address when requesting kits. The last date to request bridge kits for the competition is January 31.)

WHY? **FOR FUN!! FOR PRIZES – 1st (\$75), 2nd (\$50), and 3rd (\$25) place!!**

Winner is determined as the bridge with the highest structural efficiency, E .

$$E = \frac{\text{Load supported (50.000g max.)}}{\text{Mass of bridge (grams)}}$$

Official rules and bridge specifications can be found at:
http://bridgecontest.phys.iit.edu/public/international/2018/international_rules

BRIDGE BUILDING HELP CAN BE FOUND AT: <http://bridgecontest.phys.iit.edu/public/international/index>

COMPETITION DAY CHECK IN INFORMATION

- Check in of bridges will begin at 9:00am at LASIR. Small group tours of the lab will be provided during the check in period. The 20,000 square-foot LASIR facility houses a CH-53A Super Stallion heavy-lift helicopter airframe, full-scale wind turbine blade section, wind turbine test chamber and a military Humvee. LASIR enables researchers to test advanced sensor systems that can detect the earliest signs of failure in a variety of structures in the built environment including aircraft, automobiles and wind turbines. More details about the lab itself can be found here:
<http://archive.tennessean.com/article/20131017/BUSINESS04/310170037/Vanderbilt-School-Engineering-open-cutting-edge-research-lab->
- Bring your completely assembled bridge in a labeled box to the check in area.
- Contest volunteers will guide you through the process.
- Bridges that pass check-in and qualify will be taken to the testing area.
- Bridges that do not meet the contest specifications will be disqualified and are ineligible for prizes; however, they will still be tested.
- Testing will begin as soon as there are a sufficient number of bridges checked in.
- Please read and follow the contest rules
(http://bridgecontest.phys.iit.edu/public/international/2018/international_rules).
- Competition loading will stop at 50kg, but loading will continue until the bridge fails.
- Bridge kits (BASSWOOD) are available online at several art supply houses. One of many online suppliers is at:
http://www.modernss.com/shopping/family_sale_0_familyid_4357_cat_965

WINNERS!!!

All Contestants receive certificates for participation CASH PRIZES!!

1st Prize – Trophy and \$75.00, 2nd Prize – Trophy and \$50.00,

3rd Prize – Trophy and \$25.00

This is a regional qualifying competition. The top two finalists will be eligible to compete in the international competition.

<http://bridgecontest.phys.iit.edu/public/international/index>

For more information on the competition or event details, please see our Facebook page:

<http://www.facebook.com/BridgeBuild>

or contact

Janey Camp (janey.camp@vanderbilt.edu)