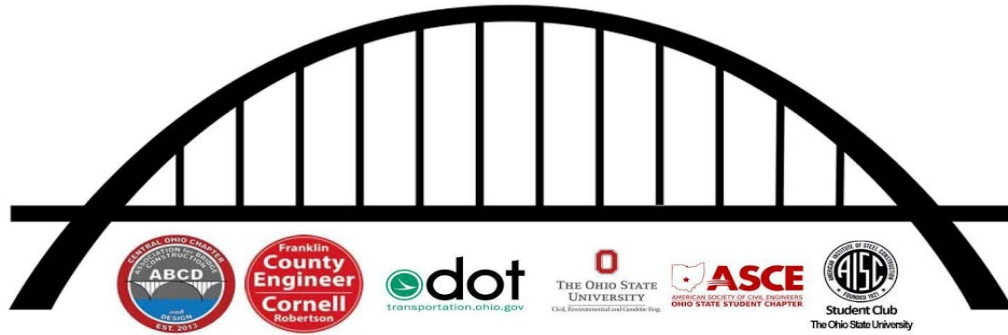


# CENTRAL OHIO



## MINIATURE BRIDGE BUILDING COMPETITION

January 5, 2021

**\*\* Now open to 9th through 12th grade students \*\***

Dear Educator,

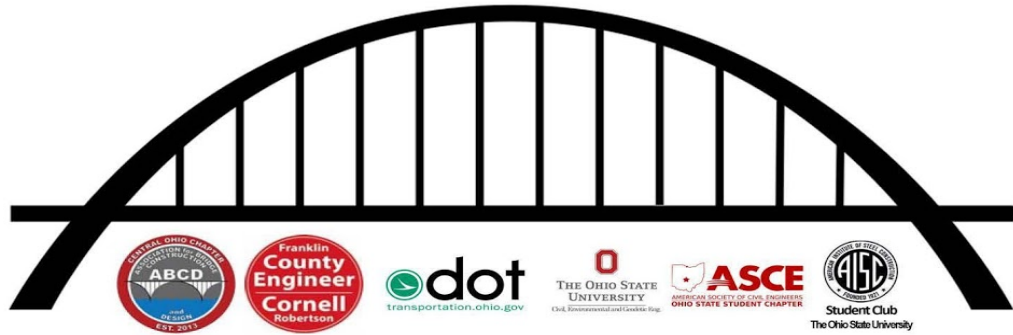
We would like to invite you and your students to participate in the first, hopefully to be annual, Central Ohio Miniature Bridge Building Competition (COhMBBC). The purpose of the event is to provide the opportunity for your students and the local civil engineering community to interact and to help your students:

- Learn how to apply principles of physics and math to bridge design and construction;
- Undergo the process of preliminary design, detailed design and construction of a miniature bridge to understand the hard work and challenges of the civil engineering world;
- Experience firsthand the procedure of testing an engineered element to better understand its capabilities;
- Learn about the many facets of a fascinating and challenging career in civil engineering.

The event is being sponsored by the Central Ohio Association of Bridge Construction and Design (ABCD), The Franklin County Engineer, The Ohio State University (OSU), the OSU ASCE Student Chapter, the OSU AISC Student Chapter and the Ohio Department of Transportation (ODOT) District 6.

The objective of this event is to design and build a structure with the highest load-to-weight capacity ratio (Failure Load/Weight), over a predetermined span using supplied materials. The bridge must have an unobstructed flat roadbed capable of allowing a wheeled car to pass over its entire length. We are opening the event to individuals with an accompanying adult/chaperone or teams that may consist of 2-3 students and one chaperone. A chaperone cannot be responsible for more than 3 teams. The **event is open to students in 9th through 12th grade** and each individual or team may enter only one bridge. Due to COVID-19 restrictions on group meetings, the bridge must be built off site, adhere to the competition specifications and brought to the designated testing / loading location on the assigned day at the assigned time to limit the number of people at the testing location. If a team prefers, or if Public Health dictates, a team or individual may sign up to drop off their bridge ahead of the competition. The competition will be streamed live through a virtual platform. Teams will be notified of their scheduled testing time so they may view it live. Loading and testing will be performed by the competition judges. We are not limiting the number of students from each school that participate. This is an engineering event; therefore, failure to adhere to the rules and regulations herein will incur penalties against the final score. The deadline to register is January 31, 2021. Practice and competition materials will be sent out once your registration is received. Please go through the register link at this website to complete your registration: <https://www.abcdco.org/outreach.html>

# CENTRAL OHIO



## MINIATURE BRIDGE BUILDING COMPETITION

The loading/testing event will take place on **February 20, 2021** at the office of TRC between the hours of **8 am and 4pm**. **COVID-19 protection protocols will be provided prior to the testing date and will include but is not limited to masks being required at all times within the testing facility.** Breakfast or lunch will be provided depending on your scheduled testing/loading time. Transportation to and from the event will need to be provided by the individual or school. Additional information about the venue, schedule for the loading/testing day and parking will be provided on the website closer to the event date. There is no cost to participate aside from transportation costs to and from the event venue and the cost of any tools the individual or team may need that the individual or school does not currently have access to. If you cannot afford the cost of the tools, please reach out to the event coordinator to ask for assistance in obtaining the necessary tools.

If you have any questions about the event or are interested in having a representative from the civil engineering community virtually visit your school in preparation for the event or just to introduce your students to civil engineering please reach out to the ABCD Outreach Director (Event Coordinator), Julia Hart, at [Cohmbbc@gmail.com](mailto:Cohmbbc@gmail.com).

Please refer to the event website (<https://www.abcdcoh.org/outreach.html>) for additional information and updates. The bridge specifications will be available on the event website soon.

Sincerely,

*The COhMBBC Committee*

**Julia A. Hart, PE, Event Coordinator**  
ABCD Outreach Director

**2LMN** Structures Dept. Head

**Abbey Zimmer**  
Transportation Engineer 2  
ODOT District 6 Construction



**Edwin H. Herrick, P.E.**  
Bridge Design Engineer

**Chris Hay, PE**  
ABCD Website Director

**TRC** Bridge Engineer

**Jieun (Jee-Eun) Hur, Ph.D., P.E.**  
Assistant Professor of Practice  
Civil, Environmental, and Geodetic Engineering



**Simone Y. Burley**  
Diversity & Inclusion Coordinator