# The ASCE Intermountain Southwest Student Symposium (ISWS) will occur in Logan, Utah, April 11<sup>th</sup> – 13<sup>th</sup> 2024.

Please use the QR Code below if you would like to sign up.

We need you! There is a place for everyone! We specifically need assistance in these areas:

## Judges:

Concrete Bowling – 1 to 3

Concrete Canoe - 3 to 5

Construction Institute – 3

Environmental Design – 1 to 3

Paper Competition – 3 to 5

Steel Bridge – 10 to 16

Surveying – 3 to 5 (At least one must be a Professional Land Surveyor)

Sustainable Solutions - 3 to 5

Timber Strong – 6 to 15

## **Competition Coordinators:**

Each competition needs a competition coordinator. The coordinator's job is to be familiar with the rules of the competition, identify the items that the host school needs to provide for the competition, and manage a group of people to lead the event. They will create a plan and a schedule for their event. The coordinator will work with the planning committee and be the liaison between the planning committee and the competition judges. A list of competitions is on the following pages.

Rules for society wide competitions can be found at:

https://www.asce.org/communities/student-members/conferences/rules



https://forms.gle/KzM5zrQy4gmxT9xs8

\* Indicates local competition – Assistance in designing rules is desired

## \*Concrete Bowling

Teams make a bowling ball out of concrete and compete in a five-frame bowling tournament at the symposium.

#### Concrete Canoe

Teams design a concrete mix, a canoe mold, and then construct a concrete canoe. The teams write a design report, present their findings, then race their canoes at the symposium.

#### Construction Institute

Teams will arrive at the symposium and receive tasks related to real world construction engineering challenges. The team will provide written/diagrammatic responses and offer a presentation explaining their solution.

## \*Environmental Design

Environmental design teams face a challenging prompt developed by the host school that may include air quality, water pollution or solid waste issues. Last year, the prompt required teams to create a portable gravity-fed water filter that could be attached to the back of a truck bed and used in emergency situations. Student teams, presented, assembled, and tested their filter designs at the symposium.

#### Paper Competition

All schools must participate in the paper competition in which a student writes a technical paper in response to a prompt. This year, the prompt will be the same as the Daniel W. Mead Prize for Students, which discusses engineers' ethical responsibilities and the use of Al.

#### Steel Bridge

The Student Steel Bridge Competition challenges students to utilize their academic prowess to design and construct a scale-model bridge. Teams pre-fabricate pieces of limited size that are assembled during a timed competition. Bridges are subjected to lateral and vertical loads, with winning teams receiving an invitation to the national competition.

## **Surveying Competition**

Teams will be required to use standard surveying field and office equipment and procedures to complete various surveying tasks.

# Sustainable Solutions

Teams respond to the request for proposals to revitalize and redevelop three blocks of its waterfront area in the fictional City of ASCE. Teams are asked to use the Institute for Sustainable Infrastructure's Envision framework to meet the City's sustainability goals.

### Timber Strong

Teams design and build an artistically creative 2-story wood light-framed building that is sustainable, aesthetically pleasing and structurally durable. The building is designed and modeled prior to the symposium and constructed in a timed competition.

### \*Transportation

Faced with a real-world transportation problem, teams work to develop innovative solutions that could be implemented in practice. Intersection design, traffic congestion, highway geometry and transit-modeling are just a few examples of the types of problems students may encounter. Teams document and present their projects at the regional competition.

## Volunteers At the Symposium:

Concrete Bowling: 2+ Concrete Canoe: 10+

Construction Institute: 2+ Environmental Design: 2+ Paper Competition: 2+

Surveying: 3+

Sustainable Solutions: 2+

Steel Bridge: 6+ Timber Strong: 6+ Transportation: 2+