



**UTILITY ENGINEERING
& SURVEYING
INSTITUTE**

2022 UESI Pipelines Conference Student Competition

Purpose

The educational and professional goals of the competition include basic understanding of the importance of utility engineering and surveying throughout the civil engineering profession. The competition will introduce basic concepts to students which will increase their knowledge as they enter the workforce.

Eligibility

The competition will be open to all college/university undergraduate students enrolled in applicable two or four year programs within the US and Canada. All students must be student members of ASCE. All winners will receive full admission to the conference and a \$600 stipend. All other related expenditures are the responsibility of the students. The competition will be limited to 20 students who will be grouped into teams upon arrival.

Awards

Each participant of the first place team will receive a trophy and a \$500 scholarship. Additionally, the winning team will be recognized at the Pipelines Conference during one of the events. All participants will receive a tee shirt.

Ethics

According to the ASCE Code of Ethics, Canon 5, "Engineers shall build their professional reputation on the merit of their services and shall not compete unfairly with others".

In the context of this contest, "unfair competition" may include conduct such as the following:

- Failure to provide proper credit for past teams, plagiarism, or any other false statements concerning the source of material used in the contest.
- Taking other people's designs, artwork, or other creative content without permission (for an overview of Intellectual Property Laws, including Trademark and Copyright, visit <https://fairuse.stanford.edu/overview/introduction/intellectual-property-laws/>).
- Any false or malicious statements about other teams, members, or others involved in the competition.

Required Conduct

All participants shall act professionally and respectfully at all times. Failure to act appropriately can result in sanctions, disqualification, and loss of invitations to future competitions or Society-wide competitions. The inappropriate use of language, alcohol, or materials, uncooperativeness, or general unprofessional or unethical behavior will not be tolerated.

Overview

Teams will be provided CCTV footage for a section of sanitary sewer pipe (Citizen's Energy Group) to code using NASSCO requirements. Plans and/or SUE data will also be provided showing other utilities or constraints in the area. Students will visit preset vendors within the vendor hall to determine possible replacement or rehabilitation options. The teams will develop the most feasible, cost effective method to repair the defects within the sewer. A maximum 10 minute presentation followed by a 5 minute Q&A session will scored to determine the most effective solution.

Scoring

1. Meet with predetermined vendors (10 points)
2. Correctly identify and code defects (40 points)
3. Presentation (50 points)

Judging

The Younger Member Engagement Committee will select the judging panel to evaluate the competition scoring. The decision of the judges is final.

Materials

All educational material will be provided before the competition or onsite. UESI will provide a laptop if a team does not have access to one. NASSCO coding information will be distributed beforehand so students may familiarize themselves with the language.

Coaching

Members of the Younger Member Engagement Committee will be available throughout the process to answer questions.

Site Visit

If feasible, a site visit of a similar project will take place on the afternoon the competition is completed. All safety requirements will be provided. Students are required to wear closed toed shoes.

Timeline

Monday (Day 1)

8am to 9am – Meet with students to go over the competition, short presentation from Citizen's Energy Group on day-to-day use. Provide NASSCO guidelines and SUE standards (ASCE CI 38-02). Equipment/sponsor demo(s).

9am to 4pm – Meet with vendors in exhibition hall, review CCTV video and SUE information, prepare short presentation (10 min) including costs, reasoning, and conclusion.

Vendor meetings - Pipe inspection (NASSCO), Pipe material (DIP, PVC, clay, fiberglass, etc.) for cost and utilization, Rehabilitation (CIPP, pipe bursting, manhole) for cost and rehabilitation, Dig and replace contractors for cost and feasibility, bypass services, etc.

Tuesday (Day 2)

8am to 1030am – Presentations

1030am to 11am – Competition committee presentations.

1130am to 1pm – Winner presentation at Awards luncheon

130pm to 4pm – Possible tour of active jobsite (Citizen’s Energy Group or contractor). CCTV, rehabilitation, or SUE work. Students required to closed toed shoes. All other PPE to be provided. (Optional)