2020 PNW ASCE Regional Conference

What is the ASCE PNW Regional Conference?
The PNW Regional Conference is one of many student conferences in the Nation. The PNW regional conference includes student participants from Washington, Oregon, Idaho, and Alaska. This year students are participating in five different events hosted at the University of Washington. We are expecting over 300 Civil and Environmental Students from 20 PNW Universities to attend. It is the first year UW has hosted since 2012 as the conference rotates year to year, and it is the first time the Sustainable Solution competition is offered in the region.

The PNW ASCE student conference allows Civil and Environmental engineering students within the PNW to work on challenging projects, showcase their skills and achievements, and compete with other Universities. Students compete in each competition with the winner heading to the National Competition in which they have a chance to win a national title.

Environmental competition
In the environmental competition, students are given a scenario in which a major earthquake has struck the Pacific Northwest, and access to clean water is uncertain. Students must design a filter out of supplies purchased from a local hardware store to attempt to treat water from a nearby water source to a drinkable standard. Students are judged on their effluent quality, filter speed, water retention, technical paper, poster display, and for the 5 finalist groups, an oral presentation.

Concrete Canoe Competition
The first Concrete Canoe competition was held in 1988 and challenges students to design, construct, and race lightweight concrete canoes. It provides civil engineering students on opportunity to gain hand-on develop leadership skills and gain hands-on experience that cannot be learned in the classroom. The competition is split into four equal categories with teams earning points for a technically written proposal for their design, an oral presentation, the aesthetics and finish of the canoe, and canoe races.

Technical Paper Competition
The technical paper competition is one in five competitions presented at the regional ASCE student conferences. Established by Daniel W. Mead in 1939, it encourages students to gain professional writing skills to advance their qualifications in the workforce. The paper consists of a less than 2000 words essay on a given topic and a presentation on the day of the competition. Since all universities participating the in conference must have a single student submit a technical paper, the judges will be looking for five exceptional papers and presentations to become finalists and move on to nationals. Further information and rules can be found on ASCE.org.

Sustainable Solutions Competition
The Sustainable Solutions Competition challenges students at an intercollegiate level to design and fabricate a sustainable structure in a design-build capacity as a solution to the real-world civil engineering issues. This year the Sustainable Competition is taking the form of a Tactical Urbanism Challenge. Students participating are tasked with designing and constructing a prototype bus stop for the 2020 Athletic Games. Prototypes will be designed to shelter occupants from the elements, and they will also encompass a temporary low cost, innovative solution to improve the overall public space. The competition has four main phases for judging; Technical papers, Timed construction & inspection, Presentation & Interviews, and Sustainability via the Envision rating system.

Surveying Competition
The goal of this competition is for students to recognize the importance of basic surveying principles in all civil engineering projects. Mainly, the competition promotes a clear understanding and application of surveying methods relevant to the job site and during the design process. The tasks on this competition involve: Pacing, differential leveling, building stakeout and the calculation of the depth of a proposed sewer line and the cut at each station. Such tasks allow students to use standard field equipment and procedures to solve common problems encountered in the industry.