

SIGNIFICANT FIGURES

CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO

April 12, 2020

Volume 32, Winter Edition

The winter quarter was a busy one for SCE! Despite still being fully online, this quarter was full of community service events with local SLO entities, and our social events did not lack either!

Winter Quarter Presentations

5th Meeting

Dr. Wang, a new faculty member from our Civil and Environmental Engineering Department, spoke about his research and experience in the structural engineering, material science, and data analytics industries.

7th Meeting

Travis Deane, from Shannon & Wilson Geotechnical and Environmental Consultants, shared a strange geologic project that disrupted a major rail line, pipeline, and state highway in the Imperial Valley. Travis also spoke about how the company was able to ethically coordinate and prioritize neighboring landowners and stakeholders.

6th Meeting

Representatives from MKN
Associates presented on their career
development experiences and
exciting projects. The MKN team
included the CEO/President, Mike
Nunley, as well as Assistant
Engineers Cindy Esparza, Ryan
Provost, and Stefanos Word.

8th Meeting

Cary Ronan and Justin Ray, representatives from Langan, shared their experiences with licensure in California as well as other states. The speakers also shared about their career development experiences as well as fun San Francisco Bay Area projects they have had the opportunity to work on with Langan.

Interested in speaking at a general meeting?
Contact **Dana Ebe** at **correspond.cpsce@gmail.com**

Professional and Technical

CE Workshop Series Session #1

The Civil Engineering Workshop Series is a new educational outreach program developed by Cal Poly SCE with the aim of showcasing the different civil engineering disciplines. Students get the opportunity to listen to a civil engineer who works in the featured profession and do an engineering activity related to the discipline. This first session was about structural engineering where we learned about the type of work structural engineers do, what it's like in the day in the life of a structural engineer from Charles Ashley, SE of Ashley & Vance, and did an online engineering activity of building bridges.



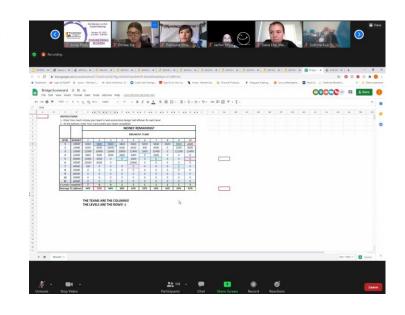
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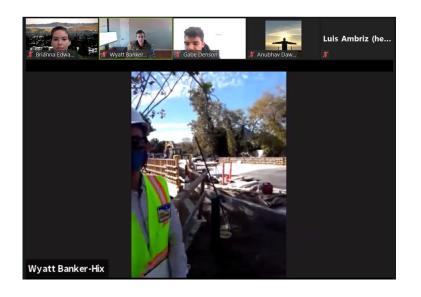
CE Workshop Series Session #2

This second session was about transportation Engineering where we learned about the type of work transportation engineers do, what it's like in the day in the life of a transportation engineer from Charles Ashely, PE of Cal trans and did an online engineering activity of street design.

CE Workshop Series Session #3

This third session was about construction engineering where we learned about the type of work construction engineers do, what it's like in the day in the life of a construction engineer from David VanMuyden, PE of Cal Portland, and did an online engineering activity of a construction plans scavenger hunt.



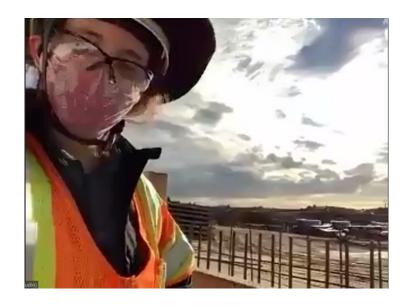


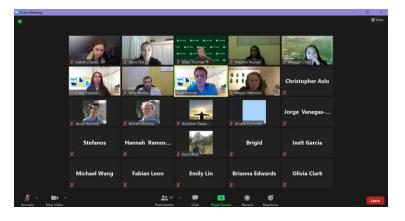
Marsh Street Bridge Tour

Civil engineer Wyatt Banker-Hix talked about what it is like working for a public agency like the City of SLO, including typical projects and budgets. He then showed us a video of a recent project, the Marsh Street Bridge remodel. He talked about the scope, budget and schedule of the project. He also talked about project obstacles, such as environmental concerns and mitigation, as well as the historical background of the bridge.

LAX Construction Tour

Alumni Stickelmaier, Megan representatives of the Los Angeles World Airports (LAWA), and Clark Construction gave a presentation on current projects regarding modernization of Angeles Los International Airport (LAX). They then talked about Receiving Station "X" which is part of the overall modernization that is currently being constructed. After the overview, Megan took us out and showed us the actual site, including the excavation activities and newly poured footings.





Post-COVID Engineering Panel

Professionals from ASCE SLO Branch shared their experiences on how they and their respective companies responded to COVID, what they learned, and their post-COVID plans.

Winter Events

Shark Tank Game Night

SCE Mentorship helped members channel their inner "Shark Tank" personas by having small groups make impromptu presentations to sell a unique item to the entire audience on the call.





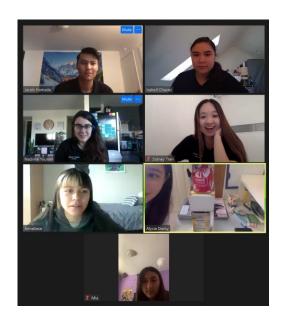
SCE Game Night

SCE members got together and played Among US for roughly two hours. During the game people got to socialize and practice working as a team. The event was a lot of fun and there was a lot of positive feedback from the participants.

Arellanes Elementary School Virtual Classroom Visit

Cal Poly SCE members and officers gave an introduction about Civil Engineering and the six different concentrations offered here at Cal Poly. Several fundamental engineering concepts such as how a structure responds to a load, the mechanics of materials, and effective shapes within structural engineering were taught. Volunteers were responsible in helping to deliver the presentation and facilitating the paper tower activity.





Winter BAE Day Outreach

Each year, SWE hosts a Winter Building an showcase Engineer Day to engineering disciplines. We participated by introducing all the civil engineering disciplines offered here at Cal Poly and the basics of structural engineering (ie. Loading types, effective shapes, critical load). Another segment of the activity is the inclusion of the engineering design process which students applied throughout the paper bridges building activity.

Cal Poly Seeds in STEM

The Cal Poly LAES Senior Design group hosted a Seeds in STEM event where students from the Santa-Maria School District learned different engineering disciplines alongside a story line. Students moved through each engineering activity learning about different definitions and the purpose of each engineering discipline. When it came to the civil engineering discipline, we taught them about different types of bridges and the forces members of the bridge experiences. Students had the opportunity to explain definitions such as what is a force and show with their hands what tension/compression looks like. Then, students did a bridge building activity using straws and tape.



Interested in becoming a sponsor for the Cal Poly SCE Chapter? If so, please contact **Meagan Chan** for more information at **treasurer.cpsce@gmail.com**.

Upcoming Events

We hope everyone has been staying safe, staying healthy and practicing social distancing. With the recent events and big change of classes going completely online, there is no need to worry, as SCE will still be coming to you virtually! We will continue to work to be a resource for our members and keep up the aspects of SCE that you all know and love.

In order to stay connected with everyone, we will be utilizing social media and our website a lot more; you can find us at:

Website: cpslosce.com
Instagram: @sce_calpoly

Facebook: Cal Poly Society of Civil Engineers

Snapchat: sce_calpoly

PSWC UPDATE:

Unfortunately, due to COVID-19 PSWC 2021 in-person events were cancelled again for the year, but UCLA did have all technical teams present their project and live-streamed the conference on Facebook. All the teams prepared as best they could throughout winter quarter despite the virtual platform.

Despite not having a physical competition, our technical teams placed as follows: surveying (1st), sustainability (2nd), transportation (2nd), environmental (2nd), and technical paper (3rd), with our student chapter placing overall 3rd! Thank you everyone for the ongoing support of our students, we are definitely going to be returning next year ready to do it all

You can find more information at **cpslosce.com** and connect with us on Instagram, Facebook, and Snapchat.







Cal Poly Society of Civil Engineers

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