

ASCE AND UC BERKELEY PRESENT

APRIL 23-25 2020
@ UC BERKELEY

MID PAC 2020

MAILER 1





October 15, 2019

Mid-Pacific Regional Conference Members,

The American Society of Civil Engineers Student Chapter at the University of California, Berkeley is pleased to announce that we will be hosting the 2020 Mid-Pacific Regional Conference on April 23-25, 2020. We are excited to invite all of you to our campus and the greater East Bay area and thankful for the opportunity to host this conference.

This is the first of three mailers for the Mid-Pacific Conference that will be released over the next several months. Each mailer will contain information regarding the competition and will be updated with more detail in each successive mailer. Please retain this mailer for your records, as it contains valuable information for your competition teams. If you have any questions or concerns, please email us at cee-midpac2020@berkeley.edu.

In this mailer, you will find the following information:

- Summary of Deadlines
- Tentative Conference Schedule
- Receipt Confirmation
- School Registration Forms
- Hotel Information
- Eligibility Requirements for Advancement to National Competitions
- Competition Contacts
- Competition Rules

The 2020 Mid-Pacific Conference website's link is below. This website contains vital competition information, such as mailers and rules, so please visit this site regularly for information and updates.

midpac2020.weebly.com

Sincerely,

Hagen Tam
2020 Mid-Pacific Student Conference Coordinator



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Summary of Deadlines

Deadline	Task
October 15, 2019	Mailer I Released
November 1, 2019	Concrete Canoe Pre-qualification form & Schedule submission
November 15, 2019	Mailer I Receipt Confirmation + Hotel Poll
December 1, 2019	School Registration
January 15, 2020	Mailer II Released
February 15, 2020	Mailer II Receipt Confirmation
February 17, 2020	Concrete Canoe Technical Proposal
March 1, 2020	Individual Attendee Registration
March 22, 2020	<ul style="list-style-type: none"> - Sustainable Solutions Design Paper - Geo-Wall Design Paper - Daniel W. Mead Paper - Transportation Technical Paper - Water Treatment Technical Paper
April 1, 2020	Late Individual Attendee Registration
April 15, 2020	<ul style="list-style-type: none"> - Concrete Canoe Presentation - Sustainable Solutions Poster/ Presentation - Geo-Wall Design Poster - Daniel W. Mead Presentation - Transportation Poster - Water Treatment Presentation
April 23-25, 2020	2020 Mid-Pacific Conference





Tentative Conference Schedule: Day 1

Thursday, April 23				
Competition	Time		Event	Location
	Start	End		
-	12:00 PM	1:00 PM	Registration & Check-In	Richmond Field Station
-	1:00 PM	2:00 PM	Welcome Meeting	Richmond Field Station
Sustainable Solutions	2:00 PM	3:00 PM	Captains' Meeting	Richmond Field Station
Water Treatment	3:00 PM	4:00 PM	Captains' Meeting	Richmond Field Station
Transportation	3:00 PM	4:00 PM	Captains' Meeting	Richmond Field Station
GeoWall	4:00 PM	5:00 PM	Captains' Meeting	Richmond Field Station
Concrete Canoe	1:00 PM	2:00 PM	Captain's Meeting	Richmond Field Station
Concrete Canoe	12:00 PM	2:30 PM	Set Up	Richmond Field Station
Concrete Canoe	2:30 PM	5:00 PM	Display Judging	Richmond Field Station
Concrete Canoe	5:30 PM	9:30 PM	Presentations	Barbara & Jay Vincent Park
YMF	7:00 PM	10:00 PM	YMF Social	Pauley Ballroom West





Tentative Conference Schedule: Day 2

Friday April 24				
Competition	Time		Event	Location
	Start	End		
-	7:00 AM	10:00 AM	Breakfast	Barbara & Jay Vincent Park
-	11:00 AM	2:00 PM	Lunch	Barbara & Jay Vincent Park
Concrete Canoe	7:00 AM	8:00 AM	Arrival/Unloading	Barbara & Jay Vincent Park
Concrete Canoe	8:00 AM	9:00 AM	Dunk Test	Barbara & Jay Vincent Park
Concrete Canoe	9:00 AM	12:30 PM	Endurance Races	Barbara & Jay Vincent Park
Concrete Canoe	1:30 PM	5:30 PM	Sprint Races	Barbara & Jay Vincent Park
Concrete Canoe	5:30 PM	6:30 PM	Clean Up	Barbara & Jay Vincent Park
Mini Games	9:30 AM	11:00 AM	Spaghetti Tower	Barbara & Jay Vincent Park
Mini Games	12:00 PM	1:00 PM	Concrete Bowling	Barbara & Jay Vincent Park
Mini Games	1:30 PM	3:00 PM	Egg Drop	Barbara & Jay Vincent Park
Mini Games	3:00 PM	4:30 PM	Paper Airplanes	Barbara & Jay Vincent Park
-	11:00 AM	2:00 PM	Lunch	Memorial Glade
Water Treatment	11:00 AM	4:00 PM	Presentations	Davis/O'Brien Hall
GeoWall	11:00 AM	4:00 PM	Presentations	Davis/O'Brien Hall
Sustainable Solutions	11:00 AM	4:00 PM	Presentations	Davis/O'Brien Hall





Tentative Conference Schedule: Day 3

Saturday, April 25				
Competition	Time		Event	Location
	Start	End		
-	7:00 AM	10:00 AM	Breakfast	UC Berkeley Campus
-	12:00 PM	2:00 PM	Lunch	UC Berkeley Campus
GeoWall	7:00 AM	8:00 AM	Set Up	UC Berkeley Campus
GeoWall	8:00 AM	3:30 PM	Construction & Loading	UC Berkeley Campus
GeoWall	3:30 PM	4:30 PM	Clean Up	UC Berkeley Campus
Water Treatment	7:00 AM	8:00 AM	Set Up	UC Berkeley Campus
Water Treatment	8:00 AM	3:00 PM	Construction & Testing	UC Berkeley Campus
Water Treatment	3:00 PM	4:00 PM	Clean Up	UC Berkeley Campus
Sustainable Solutions	7:00 AM	8:00 AM	Set Up	UC Berkeley Campus
Sustainable Solutions	8:00 AM	3:00 PM	Construction & Loading	UC Berkeley Campus
Sustainable Solutions	3:00 PM	4:00 PM	Clean Up	UC Berkeley Campus
MEAD Paper	8:00 AM	11:30 AM	Presentations	Davis/ O'Brien Hall
Transportation	8:00 AM	11:30 AM	Presentations	Davis/ O'Brien Hall
-	5:00 PM	6:00 PM	Business Meeting	Davis/ O'Brien Hall
Berkeley Banquet	7:00 PM	7:30 PM	Arrival	Craneway Pavilion
Berkeley Banquet	7:30 PM	11:00 PM	Festivities	Craneway Pavilion





Mailer I Receipt Confirmation

To confirm that your school has received Mailer I for the 2020 Mid-Pacific Conference, please complete the “Receipt Confirmation” form by using the link below.

<https://forms.gle/mBS6yWFbN9YsGPfT6>

This form is due on November 15, 2019. If you have any questions regarding the “Receipt Confirmation” form, please contact us at cee-midpac2020@berkeley.edu.





School Registration Forms

School registration for the ASCE 2020 Mid-Pacific Conference is \$100 per competition per school and is due on December 1, 2019. Any school registration that is postmarked later than December 1, 2019 will be considered late. There will be a \$100 penalty per competition for late registration.

Please print and fill out this page and mail it together with a check to our address provided below. Please make checks payable to: **ASUC/CEE JFC**.

School Name: _____

We will be participating in the following events:

- Concrete Canoe*
- Sustainable Solutions*
- Geo-Wall*
- Water Treatment*
- Transportation Solutions
- Daniel W. Mead Paper
- Concrete Bowling
- Spaghetti Tower
- Egg Drop
- Paper Airplanes

*denotes a \$100 fee for these competitions

Address:

Department of Civil and Environmental Engineering
ATIN: Hagen Tam
750 Davis Hall
University of California, Berkeley
94720-1710

If you have any questions regarding school registration, please contact us at cee-midpac2020@berkeley.edu.





Individual Registration

We have not decided on an exact individual registration price for the ASCE 2020 Mid-Pacific Conference. However, we do know that it will be in the range of \$50 to \$75 per person. It will be due on March 1, 2020. We are still waiting on final confirmation of some donations, and once those donations come in we will finalize and release the individual registration.

Here is an example of the spreadsheet we will send out with Mailer 2 for collecting information for individual registration:

<https://drive.google.com/file/d/1baD1FcRGnsKWiHSXzWxHljyKerV5up6/view?usp=sharing>

We will ask that the information on the spreadsheet be filled out for each registrant, and that as a school you reply to the email with a completed copy of the spreadsheet, and physically mail a check corresponding to the number of registered participants.

In order to collect this information, we suggest making a Google Form with the spreadsheet headings as questions and copying the entire block of Google Form responses into the spreadsheet template that you will send back to us.





Hotel Information

We are currently still working on getting room blocks at hotels in the area. In order to do so, we will need more information about your hotel accommodations. We are hoping to find a hotel that has the capacity to accommodate all of you who are interested at a price within your price range.

If you would like to be included on the hotel block, and have not already filled out the hotel poll, please do so ASAP, so that we can get a more accurate headcount for hotel room block reservations.

Hotel Poll: <https://forms.gle/7zflpHjpajdiL9ze7>

If we do not receive a response on this hotel poll by November 15, 2019, we will move forward with hotel blocks under the assumption that your school does not want to be included in the hotel room block for MidPac 2020.



Eligibility Requirements for National Competitions

The following qualifications are required of all ASCE Student Chapters in order to participate in an ASCE-sponsored National Competition:

An ASCE Student Organization must:

1. Be in good standing with ASCE:
 - a. Have paid their annual dues, as received by ASCE, prior to the start of the Student Conference; and
 - b. Have submitted their student chapter full Annual Report in time to be graded (reports submitted on or before February 1 meet this qualification), and have received a minimum score of 40 points out of a possible 100. **Student Chapters that submit an EZ annual reporting form do not qualify;** and
 - c. Act appropriately. As representatives of ASCE and the civil engineering profession, all competition and conference participants are expected to and must act professionally and courteously. The use of alcohol, marijuana, or other controlled substance is strictly prohibited.

Note: Invitations to Conference and National Competitions are a privilege, not a right. Failure to act appropriately can result in letters of reprimand, mandatory behavior management plans, and loss of invitations to further competition for individual institutions and/or entire conferences.

2. Attend and participate in their assigned Student Conference as shown through their school's:
 - a. Good faith participation in the Student Conference Business Meeting (at least one (1) student representative present at the **start** of the Business Meeting);
 - b. Good faith participation in the Student Conference Paper Competition, including submission and presentation by at least one (1) member of the ASCE Student Chapter. Note that any papers/presentations created for any other competition **do not count** as an entry into the Student Conference Paper Competition; and
 - c. Meeting any additional requirements of Student Conference participation set by the Student Conference at the previous year's business meeting or in their written and approved by-laws, standing rules, or constitution.



Competition Rules and Contacts





Concrete Canoe

Competition Date:

Thursday, April 23 to Friday, April 24, 2020

Competition Locations:

Richmond Field Station, Barbara & Jay Vincent Park

Summary:

In ASCE's Concrete Canoe competition each team applies their skills and knowledge to design, build and race a canoe made of concrete. The competition is composed of four parts: technical paper, presentation, display, and racing.

Rules and Forms:

The rules and forms for the Concrete Canoe competition are found on the ASCE website here:

<https://www.asce.org/concrete-canoe-rules-regulations/>

Contact:

Any questions regarding the Concrete Canoe competition can be sent to Edward Yam at

midpac2020concretecanoe@gmail.com

Pre-Qualification Form *SUBMISSION*:

The form is to be submitted to their folder in the following link no later than 11:59 pm [Eastern] Friday, November 1, 2019.

https://files.asce.org/xythoswfs/webui/xy-e3641772_1t_mBQj8oR

Preliminary Project Delivery Schedule *SUBMISSION*:

The Preliminary Project Delivery Schedule must be submitted to the team's respective folder in the link above no later than 11:59 pm [Eastern] Friday, November 1, 2019.

Technical Proposal & MTDS Addendum *SUBMISSION*:

The technical proposal and MTDS addendum must be uploaded to their respective folder no later than 11:59pm [Eastern] Monday, February 17, 2020.

File names shall be in the form of "School Name – Canoe Name – Document – Year.pdf" (examples: South Central Louisiana State University – The Mud Dawg – Proposal - 2020.pdf; South Central Louisiana State University – The Mud Dawg – MTDS – 2020.pdf).





In addition, five (5) bound copies of the Technical Proposal and MTDS Addendum must be mailed and postmarked to the address on page 7 (School Registration) above by Monday, February 17, 2020.

Address:

Department of Civil and Environmental Engineering
ATTN: Hagen Tam
750 Davis Hall
University of California, Berkeley
94720-1710





Sustainable Solutions

Tactical Urbanism

Competition Date:

Thursday, April 23 to Saturday, April 25, 2020

Competition Location:

UC Berkeley Campus

Summary:

ASCE's Sustainable Solutions competition focuses on the topic of Tactical Urbanism this year. Tactical urbanism is a modern concept that implements temporary, economical, and innovative solutions for public transit improvement. Students are tasked with the design and construction of a temporary bus stop and a site diagram for the 2020 International Athletic Games. The bus stop and surrounding site will shelter athletes as well as educate and involve the community. The deliverables include the bus stop, a site diagram, technical paper, presentation, and poster.

Rules:

The rules for the Sustainable Solutions competition are found on the ASCE website here:

https://www.asce.org/uploadedFiles/Membership_and_Communities/Student_Chapters/Content_Pieces/2020_sustainable_solutions_competition_rules.pdf

Contact:

Any questions regarding the Sustainable Solutions competition can be sent to Jeannie Yang at midpac2020sustainablesolutions@gmail.com.

Technical Paper *SUBMISSION*:

The technical paper must be submitted in PDF format to midpac2020sustainablesolutions@gmail.com by Sunday, March 22 at 11:59PM PST. Subject line must include "[School Name] Sustainable Solutions Technical Paper". The sender will receive a confirmation by email.





Water Treatment

Competition Date:

Thursday, April 23 to Saturday, April 25, 2020

Competition Location:

UC Berkeley Campus

Summary:

The ASCE Mid-Pacific Student Water Treatment Competition includes the research, design, presentation, and hands-on construction of a filter made from supplies commonly found in homes/businesses. The filter is loaded with standardized simulated wastewater to test and rank the participants from ASCE student chapters across California, China, and Canada. Students must collaborate in order to apply wastewater treatment principles and provide a solution for a real-world situation. During the competition, the project is judged on sustainability, treatment efficiency, cost, and a technical oral presentation.

Rules:

The rules for the Water Treatment competition are found here:

<https://drive.google.com/file/d/1yJZaaME1FTSqjEd2sUozjoZqcN-HNk7/view?usp=sharing>

Contact:

Any questions regarding the Water Treatment competition can be sent to Amanda Lee at

midpac2020watertreatment@gmail.com

Technical Paper *SUBMISSION*:

The technical paper must be submitted in PDF format to midpac2020watertreatment@gmail.com by Sunday, March 22 at 11:59PM PST. Subject line must include “[School Name] Water Treatment Technical Paper”. The sender will receive a confirmation by email.





GeoWall

Competition Date:

Thursday, April 23 to Saturday, April 25, 2020

Competition Location:

UC Berkeley Campus

Summary:

The GeoWall competition is organized by the Geo-Institute and ASCE to test students in their abilities to design and build a mechanically stabilized earth (MSE) retaining wall. The MSE retaining wall will consist of wall facing poster board to reinforced paper to hold the greatest load. Judging will consist of ranking schools by the least amount of material needed to support the sand and soil surcharge loads, as well as a design report and design poster. The design section is the students' chance to effectively communicate and explain their analysis to the panel judges.

Rules:

The rules for the GeoWall competition are found on the website here:

<https://drive.google.com/file/d/1tBQmSIBWRYJmbYbzYrc5JNjUTWjhBs33/view?usp=sharing>

<https://drive.google.com/file/d/1AJstAogd0vIv3j8dru7IFGosajL6NIh-/view?usp=sharing>

https://docs.google.com/document/d/1H3Qea2XXBeo_ujo_tjJmAC9DAdVa7fA0reVW5MChW8/edit?usp=sharing

Contact:

Any questions regarding the GeoWall competition can be sent to Paul Ambrose at midpac2020geowall@gmail.com.

Technical Paper *SUBMISSION*:

The design report must be submitted in PDF format to midpac2020geowall@gmail.com by Sunday, March 22 at 11:59PM PST. Subject line must include "[School Name] GeoWall Design Paper". The sender will receive a confirmation by email.





Daniel W. Mead Paper

Competition Date:

Saturday, April 25th, 2020

Competition Location:

UC Berkeley Campus

Summary:

The Daniel W. Mead Paper Competition is a competition in which an individual from each competing school writes and presents a paper on professional ethics. This contest provides an opportunity for young civil engineers to further their professional development and gain regional and possibly national attention.

Rules:

The rules and prompt can be found at this link below: <https://drive.google.com/file/d/1zMzU0BmFA-pHgeMp-wSrE9IDVO6Y95V/view?usp=sharing>

Contact:

Any questions regarding the Mid-Pac Daniel W. Mead Paper competition can be sent to Ryan Higgins at midpac2020meadpaper@gmail.com.

Paper & Presentation *SUBMISSION*.

The appropriately named paper file (see rules) must be submitted in PDF format to midpac2020meadpaper@gmail.com by Sunday, March 22 at 11:59PM PST. The appropriately named presentation file (see rules) must be submitted in .pptx format to midpac2020meadpaper@gmail.com. Subject line must include “[School Name] Mead [Paper/Presentation]”. The sender will receive a confirmation by email.





Transportation

Competition Date:

Saturday, April 25th, 2020

Competition Location:

UC Berkeley Campus

Summary:

The Transportation Competition is a competition where teams try to solve transportation problems through many different approaches. Teams competing in the Transportation Competition will develop skills in civil design, traffic signal timing, data analysis, and project planning. The competition will require a planset, a report, and a presentation to be submitted.

Rules:

The rules, prompt, and starter files can be found at this link below:

<https://drive.google.com/drive/folders/1tB7mAjG5s0zvwSpuDiM8WzDwSOAMrd7?usp=sharing>

Contact:

Any questions regarding the Mid-Pac Transportation competition can be sent to Trevor Wu at midpac2020transpo@gmail.com.

Planset, Report, & Presentation *SUBMISSION*:

The report and planset must be submitted to midpac2020transpo@gmail.com by Sunday, March 22 at 11:59PM PST. Subject line must include “[School Name] Transportation [Planset/Paper]”. Poster/Model and presentation will be due at the day of the competition. The sender will receive a confirmation by email.



Mini Games

Concrete Bowling

Rules:

Each school may enter one team, consisting of up to 3 students per school in the competition. Standard ten-pin bowling rules will apply to the physical competition. Each team will complete 6 frames, with each team member bowling two frames. No seventh frame extension. The team with the highest combined score wins.

Design:

If different members of the team wish to use different balls, that is allowed. All designs utilized in competition must be specified on a team's poster. The bowling ball must be spherical in shape. The bowling ball must NOT exceed 8.5 inches in diameter (approximately 26.7 inches in circumference). The bowling ball must weigh between 8 and 16 pounds. The ball must be made from concrete. Bowling balls from prior events may NOT be used. A team will be automatically disqualified if found using a bowling ball from previous years.

Presentation:

Each team must submit a poster board on the day of the competition. The poster must identify: school name, team members' names, mix design, construction materials and techniques.

Judges:

2 judges will preside over the competition. The judges will determine the concrete bowling winner according to the total number of points earned

Points:

Bowling	60
Engineering mix design	10
Construction methods	10
Bowling ball aesthetics	10
Sustainability	10
Poster board aesthetics	10
Total	110



Egg Drop

Rules:

Each school may enter one team, consisting of up to 10 students into the competition. They will be provided one unboiled egg, and access to materials specified below to construct the lightest contraption possible that will allow their egg to survive a 10 ft drop, with their contraption constructed within a 20 minute time span.

Materials:

- Bubble wrap
- Burlap
- Paper Towels
- Scotch Tape
- Coffee Filters
- Plastic Bag
- String
- Tissue
- Newspaper
- Cotton

Points:

Teams whose eggs break will receive 0 points.

Of the teams with unbroken eggs after the egg drop, the team with the lightest contraption will receive 50 pts. The next team will receive 45 pts, then 40 pts, etc.

Spaghetti Tower

Rules:

Each school may enter one team, consisting of up to 10 students into the competition. Each team will be provided 25 pieces of uniform length spaghetti, and a bowl of small marshmallows. In the allotted 15 minutes, teams will compete to build the highest standing structure possible! At the end of 15 minutes, a judge will measure the distance between the table top, and the highest point of each team's structure.

Judging:

Ranking determined by structure height. First place, 50 points. Second place, 45 points. Third place, 40 points, etc.

Materials (per team):

- 25 strands of spaghetti
- 1 small bowl marshmallows





Paper Airplanes (Design and Iteration)

Rules:

Each school may enter one team, consisting of up to 10 students in the competition. They will be provided several types of paper (specified below). In 20 minutes, they will design and prototype the optimal paper airplane for distance travel. Teams will be given 5 chances to launch their final prototype, with their longest distance taken as their competition distance.

This competition focuses on design and iteration, so every team will present and explain their design to the judges.

Materials:

- 10 sheets of Printer paper (8.5"x11")
- 10 sheets of A4 paper
- 10 sheets of 11"x17" paper
- 10 sheets of 8.5"x11" cardstock
- Scissors
- Scotch tape

Points:

Presentation	25
- Design Process (What were your initial thoughts? How did they change?)	5
- Iterative Prototypes (What did you made while testing things out?)	5
- Communication (Why you made the decisions you did?)	5
- Team work (How did everyone contribute?)	5
- Future Improvement Ideas (What would you do next?)	5
Distance	25
- The team with the prototype that travels farthest will be awarded 25 points. 2nd farthest, 20 points, etc.	

