# December Calendar

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<th>Sunday</th>
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<td>Grow Crew General Meeting 1pm-2pm</td>
<td>CAFES Council 5pm-6pm</td>
<td>Quarter Scale 6pm-7pm</td>
<td>AES Barbecue BRAE Ramp 11-12</td>
<td>CAFES Research Seminar: “Temporal Changes in Soil Microbiome in Response to Soil Fumigants”</td>
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<td>Breeze through Finals</td>
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<td>HOLIDAY BREAK</td>
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**Holiday Break**
Greetings everyone!

I hope you are feeling well prepared to tackle finals season. I am hosting extra hours open for tutoring during finals week. Saturday through Wednesday I will keep my schedule open from 1-4pm and from 6:30-10pm in the BRAE computer room. Always text me or email me beforehand if you intend to come, otherwise I may be late. Try to come to a session two days before your final, not just the day before! Bring your lecture notes, texts, graded work and whatever else you want to cover.

Josh Woodring
AG 200 & AG 212

Leadership Practice: Poly Royal Rodeo

Help plan the nation’s largest college rodeo by working as team members on committees!

Terms typically offered:
AG 200 - W - credit/no credit
AG 212 - S - 3 units
Instructor permission and application required
CAFES Research Seminar Series

Fall Quarter 2019

Please join CAFES for our Research Seminar Series ~ Fridays this Fall
Pizza will be served!

Erhart Agriculture Bldg. 10, Room 206 12:10 - 1:00 p.m.

- Physiological Reaction to Odorants: Carmen Licon, Dept. of Food Science and Nutrition, Fresno State (09/27)
- Dairy Waste Management Research: Tryg Lundquist, Dept. of Civil and Environmental Engineering, Cal Poly, SLO (10/4)
- Food Rheology: The Scientific Smushing of Food: Helen Joyner, Dept. of Food Science and Nutrition, Univ. of Idaho (10/11)
- Water and Weather Issues for Central Coast Agriculture: Mark Battany, UC Cooperative Extension (10/18)
- Disentangling the Local and Landscape Determinants of Pests and Pesticides: Ashley Larsen, Bren School of Environmental Science and Management, UCSB (10/25)
- Exploring the Ecological Impacts of a Novel Land Use: Utility Scale Solar Fields: Seeta Sistla, NRES, Cal Poly, SLO (11/1)
- Location TBA
- 2018 Annual Crop Statistics for SLO County: Martin Settevendemie, Agricultural Commissioner, SLO County (11/8)
- Grazing Behavior and Physical Activity Influences on Metabolism and Performance: Zach McFarlane, ASCE, Cal Poly, SLO (11/15)
- Temporal Changes in the Soil Microbiome in Response to Soil Fumigants: Shashika Hewavitharana, HCS & Strawberry Center, Cal Poly, SLO (12/6)

For questions, please call Marnie Perry at 805 756 2161

Cal Poly
College of Agriculture, Food & Environmental Sciences
BRAE 302: SERVO HYDRAULICS
Prerequisite: BRAE 216 or BRAE 324 and BRAE 234 or BRAE 301

Lecture: MWF 11.10-12.00 pm
Lab: Tues. 3-6 pm
Instructor: Dr. Mohammad Sadek

This class is designed to give students a close look at the understanding of the servo-hydraulic system when designing mobile hydraulics. The learning objectives of this course are to provide a clear understanding of efficient hydraulics system design, an understanding of feedback control (closed-loop) systems, and the ability to incorporate electronic control architecture in a hydraulic system. During the course, students will be given a set of tools they can use when designing servo-hydraulic systems and hydrostatic drivetrains, including static and dynamic analysis, servomechanism, electronic control programming, and fail-safe methods. The laboratory section will involve both experiment and design/construction activities, including the use of the Danfoss Plus+1 laboratory panels.

This course is ideal for undergraduate and graduate students interested in enhancing their skills in advanced hydraulic system design and automation.
CAL POLY AES
Agricultural Engineering Society

WHO: Cal Poly BRAE & ASM Major Concentration (all majors welcome)
WHAT: A professional club that promotes experience in industry as well as developing connections with industry professionals
WHEN: December 4th
WHERE: BRAE Lab 1
WHY: To give professional opportunities to Cal Poly students by allowing them to associate with industry professionals as well as another learning outlet to discover the variety of career paths they can take with their major
HOW: By being present and engaged, and enjoying a great BBQ!, Cal Poly Students will have access to more personalized information about their future within the Cal Poly BRAE Department as well as their career following college
The Cal Poly Society of Women Engineers, along with San Luis Obispo High School, is proud to host the California Central Coast VEX Robotics Competition on January 18, 2020 in the ATL, Bonderson, and Engineering Plaza areas. We will welcome over 50 teams to compete in this year’s game, “Tower Takeover.” If you would like to volunteer for this event, it would be greatly appreciated!

Volunteer Form:  
https://forms.gle/Y3nfPvhzZpGrihgo8  
Position Descriptions:  
https://drive.google.com/file/d/1gGd1AhokDH-Ay56iPD1hfrJ8bdyWaobC/view  
(Recommended experience is listed under the position description. No experience is needed for more than half of the available positions!)

If you have any questions, please contact Nayana Tiwari at cpswerobotics@gmail.com.

2020 VEX Robotics Competition Volunteer Sign Up

The Cal Poly Society of Women Engineers, along with San Luis Obispo High School, is proud to host the California Central Coast VEX Robotics Competition on January 17 - 18, 2020 in the ATL, Bonderson, and Engineering Plaza areas. We will welcome over 50 robotics teams to compete in this year’s game, "Tower Takeover." Game video:  
https://www.youtube.com/watch?v=_JVQQiw_OUJ.

Please view the following pdf spreadsheet to select your 1st, 2nd, and 3rd position choices prior to filling this out: https://drive.google.com/open?id=1gGd1AhokDH-Ay56iPD1hfrJ8bdyWaobC

If you have any questions, please email Nayana Tiwari at cpswerobotics@gmail.com

* Required

First and Last Name *

Your answer
Internship and Employment Opportunities

ASM and BRAE students and graduates are in high demand!

Check out [www.brae.calpoly.edu/students/employment](http://www.brae.calpoly.edu/students/employment) for even more postings!

Career Services can help you explore career options, prepare for your internship/job search, connect with employers, and more! Please visit their website for information on the services and resources they provide.

What’s Happening in CAREER SERVICES FALL 2019

12/9: Womxn’s Career Drop-in and Finals Week Support
Womxn! Stop by our booth and learn more about how Career Services can support YOU- and grab some snacks and scantrons to get you through finals week!

12/5: Making the Most of Your Winter Break
Attend this workshop and learn how to prepare for upcoming job searches.

Dec 2, 2019 12:00 AM

Nov 28, 2019 12:00 AM
Junior Civil Engineer

**CSA** is a well-established civil engineering and land surveying firm located in Benicia, California. We specialize in land development, surveying and public works projects.

We have an immediate need for a Junior Civil Engineer. Our office focuses in the design and plan preparation of land development projects of various sizes. Though not required, the ideal candidate will also have some field survey experience with topographic, boundary, and construction surveys. We offer the candidate the opportunity to perform Civil Design and related survey work.

Requirements:

- BS Degree in Civil Engineering
- Demonstrate design and plan preparation: College projects and/or intern work
- Engineer-in-Training (E.I.T.) Registration
- Excellent oral and written communication skills
- Working knowledge of AutoCAD
- Working survey experience
- Detail oriented
- Willing to travel occasionally on overnight projects
- Ability to work independently with direct guidance from principals
- Ability to obtain security and refinery clearances
- Candidates must be legally authorized to work permanently (i.e. without time limitations, without restrictions or without need for work sponsorship)
- Ability to manage time and resources to work effectively
- Physical ability and willing to work in the field

Typical work:

- Grading and Drainage design and drafting of plans
- Subdivision Plans and Maps
- Design of utilities (Water, Sewer and Storm Drain Systems)
- Hydraulic calculations for sewer and storm drain systems
- Boundary (Property Line) calculations
- Metes and Bounds documents
- Survey preparation, topographic surveys, construction staking.
- Client and Public Agency communication and coordination

CSA is a small office where the ability to work as a team member in a dynamic and positive work environment is essential. We work on a broad array of challenging and interesting projects.

The company offers salary commensurate with experience, medical insurance, vacation/holidays, 401K plans with employer contribution.

Send your cover letter and resume to:
Rod Sherry, P.E. (e-mail to: rsherry@csa-engineers.com)
Dan Cullen, P.E. (e-mail to: dcullen@csa-engineers.com)
Project Engineer Employment Opportunity

Job Title: Project Engineer  
Company: Semitropic Water Storage District  
Location: Wasco, CA  
Application Filing Period: Position will remain open until filled; the recruitment will close once sufficient number of qualified applications are received.  
Salary Range: $5500 to $6600/month, commensurate with experience  
How to Apply: Interested candidates should submit a cover letter and resume via email to mail@semitropic.com or mail to Semitropic Water Storage District, Attention: District Engineer, Post Office Box 8043, Wasco, CA 93280

The Semitropic Water Storage District (District) is responsible for the importation and delivery of surface water to our agricultural lands to reduce the demand upon the local groundwater basin. In addition to the delivery of surface water, the District operates a water banking program which stores available surface waters within the District for recovery to our banking partners when needed.

The District is seeking applicants for a Project Engineer position. The Project Engineer assists with planning and managing the District’s water distribution and banking activities, and provides administrative support to the Engineering Department.

Completion of a Bachelor of Science Degree in Agricultural or Civil Engineering is required.

Generous benefits package, including health, dental, and vision benefits, flexible spending account, retirement plan with District contributing 10% of the employees regular salary, vacation and sick leave and observance of eight holidays, plus one floating holiday; salary dependent upon qualifications.

Definition/Summary

Under the direction of the District Engineer, assists with the District's engineering activities and services. Assists with coordinating and implementing studies, grants and programs related to irrigation district services and banking activities. Performs a variety of engineering field and office duties, may manage contractors and consultants for specific tasks; serve as project engineer for public works projects; advise operations and maintenance staff on engineering matters; and draft reports for supervisory review including hydrologic, environmental, engineering, and feasibility reports.
## JOB DESCRIPTION

<table>
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<tr>
<th>Job Title:</th>
<th>Field Engineer</th>
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<td>Reports To:</td>
<td>Senior Project Manager/Project Manager/Project Engineer</td>
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<td>FLSA Status:</td>
<td>Exempt</td>
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### Job Summary

This position is responsible for providing on-site field administration, supervision, and technical management for all construction operations, including direct supervision of foreman, subcontractors, and other construction related personnel.

### Essential Duties and Responsibilities

Essential duties and other responsibilities include but are not limited to the following:

- Review design documents, shop drawings and submittals for consistency with contract scope of work.
- Set-up job site logistics.
- Identify, define and procure required craft and subcontractor services.
- Monitor project costs and identify areas for improvement.
- Develop, maintain, and distribute meeting agendas and minutes.
- Document daily construction activities.
- Assist with preparation of CPM schedule.
- Implement project engineering procedures, and other work controlling documents.
- Prepare proposals, change orders, RFI’s and letters of intent as needed.
- Change order documentation and associated cost reporting and maintenance.
- Time card review and invoice processing.
- Maintains a good working relationship with field personnel and subcontractors.
- Dedicated to achieving a “Zero Accident Culture” by adhering to site safety protocols and OSHA safety standards.
- Compile contract close out documents.
- Executes additional duties and responsibilities as assigned.

### Qualifications

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

#### Required Education and Experience

- A Bachelor of Science degree in Construction Management or Civil Engineering or related field preferred.
- One (1) year of experience and past internships in the construction industry are required.
- Strong computer skills and familiarization with software programs to include project design, job costing, scheduling and estimating.
- Excellent oral and written communication skills.
A valid California Driver's License

Competencies

To perform the job successfully, an individual should demonstrate the following competencies:

Effective Communication: Ensures that regular, consistent, and effective communication takes place. Ensures that important information is shared with others on a timely basis as appropriate in his/her organizational unit. Proactive in keeping their manager informed on a regular basis about progress and problems to avoid surprises. Leadership: Marshals resources (people, funding, materials, and support) to get things done. Makes good decisions based upon a mixture of analysis, wisdom, experience, and judgment. Sought out by others for advice and solutions. Leads by example. Anticipates problems and adapts well to changing priorities. Willing to take action, even under pressure, criticism or tight deadlines. Treats direct reports equitably and fairly. Assembles talented teams externally and internally. Creates a work environment that fosters strong morale and spirit in their team. Takes ownership of problems and shares success.

Analytical Thinking: Approaches problems using a logical or sequential approach, systematically comparing two or more alternatives; Notices discrepancies and inconsistencies in available information; Identifies parameters and considerations needed to analyze situations and make decisions; Conducts decision-based cost/benefit or risk/success analyses; Prioritizes tasks.

Collaboration: Develops, maintains, and strengthens partnerships with others inside or outside of the organization who can provide information, assistance, and support. Recognizes and appreciates the business concerns and perspectives of others; Provides valuable and needed assistance, information, and support to others, to build a basis for future reciprocity.

Conflict Management: Functions effectively when under pressure and/or while experiencing rapidly changing or uncertain conditions. Maintains self-control and composure in the face of stress, opposition, or provocation. Effectively handles a variety of complex and difficult problems or tasks at once. Maintains a positive attitude under difficult circumstances. Quickly adapts and constructively reacts to unforeseen circumstances and setbacks, reducing their severity.

Personal Integrity: Ensures integrity of the Association; Develops and practices the highest ethical standards. Expected to honor commitments. Communicates openly, honestly, and directly. Instills mutual trust and confidence. Treats all people with respect. Values diverse perspectives. Supports AAA’s diversity initiatives.

Physical Requirements

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel, reach with hands and arms, talk, hear, taste, and smell. The employee is frequently required to stand, walk, climb or balance, stoop, kneel, crouch, and/or crawl. The employee is occasionally required to sit. The employee must frequently lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.
ASABE CA-NV STUDENT RALLY

Hosted by UC Davis

Join us for industry tours, campus/lab tours, student design competition, networking, and so much more!

January 17-20, 2020

Click here to sign up!
Ventura County Young Farmers & Ranchers
College Scholarships
2020

Criteria: Ventura County Young Farmers & Ranchers will be awarding 2 educational scholarships in the amounts of $2,500 each totaling $5,000 to students from Ventura County that will be attending college with aspirations of having a career in agriculture. The completed application will be reviewed by the Board of Directors of the Ventura County Young Farmers and Ranchers. The winners will be chosen based on the strength of his/her application.

Please submit the application to the specified address no later than 1/17/2020.

Complete the following:

Name_________________________________________ Gender ____________
First Last County______________________________
Mailing Address______________________________________________ State_______ Zip Code____________
City_________________________________________________________________________ Phone Number ___________________
Email _____________________________________________ High School Name_________________________
City______________________ Zip __________
Graduation Year____________ GPA ______________

Major Choices or Current Major:
First choice______________________________________________
Second choice______________________________________________

College Choices:
First Choice__________________________________________ Applied/Accepted/Attending
(Date intend to apply)
Second Choice__________________________________________
Third Choice__________________________________________

Ventura County YF&R
5156 McGrath St. Suite 102
Ventura, Ca 93003