

BRAE WEEKLY



Engineering Systems Management Support for Agriculture
The Weekly Newsletter for the BioResource and Agriculture Engineering Department
Week 9 ~ May 28, 2019



Tractor & Equipment
Association Scholarship
Application
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Club Announcements
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May/June Calendar



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27 Memorial Day NO CLASS	28 MONDAY CLASS SCHEDULE CAFES Council 5:10PM 08-122 Grow Crew Meeting 11-12 Lab 4	29	30 AES Barbecue BRAE Ramp	31	1
2	3	4 CAFES Council 5:10PM 08-122 Grow Crew Meeting 11-12 Lab 4	5	6 AES Barbecue BRAE Ramp	7 EWB Spring Banquet 7-9pm	8
9	10	11	12	13	14	15
FINALS WEEK						
16	17	18	19	20	21	22



WE HAVE MONEY FOR STUDENTS!!! (AZ, CA, CO, HI, NV, UT, WY)

Here is a scholarship application from Tractor and Equipment Association. All high school seniors and current students at tech schools, community, junior and four-year colleges and universities are eligible (no graduate students). Preference is given to individuals in ag mechanics, engineering and related hands-on tractor and equipment studies, although all related agriculture majors may apply. Financial need is a major component.

(See page 4 for print application)

Here is a link to the on-line application: <https://www.fweda.com/tractor-equipment/>

A NON-PROFIT ORGANIZATION

2020 Research Park Drive Ste 160 • Davis, CA 95618 • (800) 578-8850 • Sandy Fiack, Scholarship

APPLICATION FOR \$1,000 SCHOLARSHIP AWARD

All high school seniors and current students at tech schools, community, junior and four-year colleges and universities are eligible. Awards will only be granted once per individual. Please limit responses to space provided. Applications may be typed or hand-written. Application deadline is September 1st. Electronic submission preferred. FAX: 916-537-5534 (or) E-Mail: efiack@traceraff.com

Applicant Name: _____
 School Attending: _____
 Intended Degree or Major: _____
 Units Completed: _____ Units Needed To Graduate: _____ G.P.A.: _____

Permanent Contact Information		Temporary Contact Information	
Home Address: _____	_____	School Address: _____	_____
City/State/Zip: _____	_____	City/State/Zip: _____	_____
Home Phone: _____	_____	Phone: _____	_____
E-Mail: _____	_____	E-Mail: _____	_____

Father's Profession: _____ Mother's Profession: _____
 Parents Approx Annual Income: _____ Your Approx Annual Income: _____

Work History (Attach a 1 Page Resume - or - Complete Below)

Employer: _____	Position: _____	Year: _____
Employer: _____	Position: _____	Year: _____
Employer: _____	Position: _____	Year: _____

List Other Scholarship Awards Received:

- 1) _____
- 2) _____
- 3) _____

List Extracurricular Activities:

- 1) _____
- 2) _____
- 3) _____

References (Name, Title & Phone Number):

- 1) _____
- 2) _____
- 3) _____

What are your plans after graduation? _____

How would you use the scholarship? _____

Why should you receive the scholarship? _____

Applicant Signature: _____ Date: _____



Engineers Without Borders

Hi EWB,
 Happy week 9! Enjoy your long weekend.

Announcements
 Want to learn more about the Sustainable Development Goals? Join us for the last General Meeting of the year, where nine EWB and CGE students will be discussing their recent trip the United Nations Multistakeholder Forum on Science, Technology and Innovation! There will also be SNACKS -- join us in 10-226 from 6:00-7:00 PM.

UPDATE: in efforts to reduce our waste we will not be giving out tickets, so be sure to follow guidelines for venmo payments as this will verify your purchase.

National Conference Proposals
 Proposals for next fall's EWB-USA national conference are due June 2nd! If you are interested in helping create a poster or presentation for the conference, please contact Emma Stine (estine@calpoly.edu) or Marta Galambos (mgalambo@calpoly.edu). The EWB-USA conference will be held November 7th-9th in Pittsburg, Pennsylvania.

The 2019-2020 officer board is also looking for a new Fundraising Coordinator. You can read about and apply for the position here: <https://forms.gle/t7imUVVPt9iEWsyq8>

Meetings
 Project Teams: are every Monday from 7:00-9:00 pm for all 5 project teams unless otherwise specified. Here are the team room locations:

- Fiji: 186-C200
- Local Projects: 186-C203
- Thailand: 186-C303

Nicaragua: 186-C202

Malawi: 186-C300

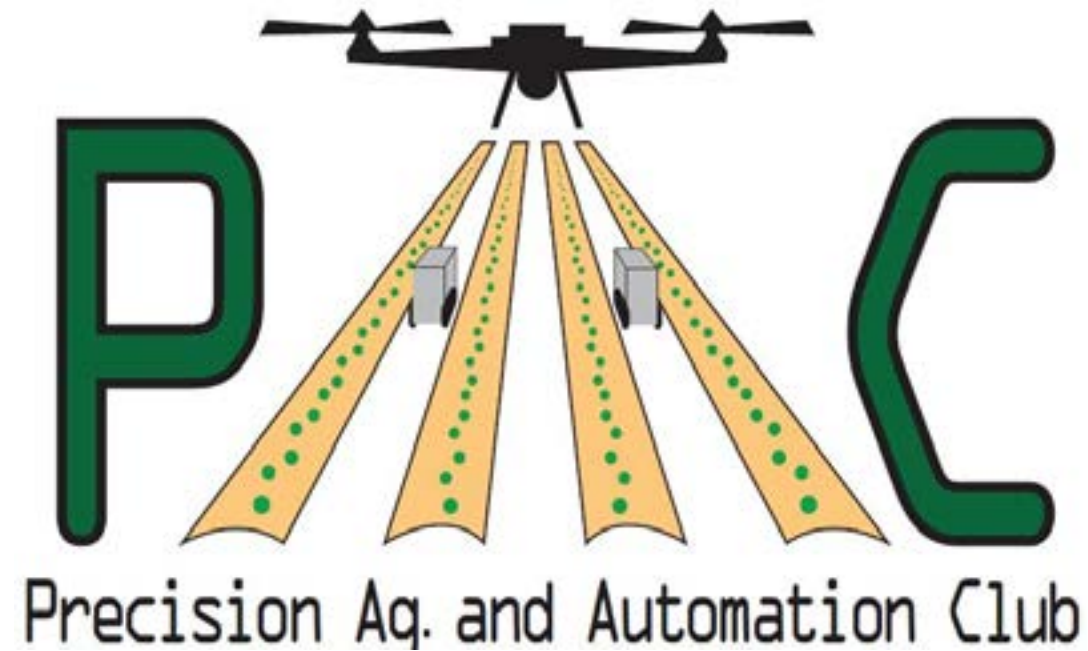
<https://docs.google.com/document/d/1jG7JnS75hwxoPNrwmNdWDeUomqumc-kTGDLb-Eg0Aeg/edit>

Critical Global Engagement Club: We will have our first discussion meeting of the quarter tomorrow. We will examine ethical fundraising and public relations, confronting the grey areas in raising money for a cause. Join us Mondays 6:10-7 PM in 186-C200.

Tea Time: Tea Time will be from 11:00-12:00 pm on Friday behind Julien's Cafe in the library. Come hang out with the President and Vice President to have any questions answered about the club.

IMPACT: Meetings are held Thursdays 2:10-3:00 pm on the second floor of the library near Julian's.





PAAC is BACK!
Pizza is provided!

Meetings are Mondays from 6-7 pm in Building 8A, Lab 4C. Call or text 760-468-6076 if you need help getting there :)

Meeting Information

This week, we'll touch base with each team, then each team will meet up and work on their aspects of the ASABE robot. As usual, we'll be having free pizza!

ASABE Robotics Competition

Every year, PAAC builds tabletop robots that accomplish harvesting tasks. We recently received the tentative guidelines for this year's competition! Click below for the details.



2019-2020 AES OFFICER TEAM

AES President – Ryan Emory

ASABE President – Mary Hambly

SMB President – Ethan Jones

Tractor Pull President – Daphne Schwartz

AES Vice President – Mikaela Jensen

ASABE Vice President – Anthony Musch

SMB Vice President – Ian Reece

Secretary – Megan Campbell

Treasurer – Grant Doerksen

Reporter – Luke Reilly

AES CAFES Rep. – Luis Villanueva

ASABE CAFES Rep. – Jose Amezcua

SMB CAFES Rep. – Reid Adams

Career Fair Chair – Bradley Livingston

SWE Rep. – Michaela Sewell

ASABE National Rep. – Luke Jackson

Communications Chair – Megan Caird

Special Events Chair – Megan Logan

Internship and Employment Opportunities⁸

ASM and BRAE students and graduates are in high demand!

Check out 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.

The following is an amazing opportunity to be involved with cutting edge research related to algae production, algae biofuels and wastewater recycling. Applications are currently being accepted for the Summer 2019 quarter. Apply to the Cal Poly Water and Energy Sustainability Training Team (WESTT).

<https://docs.google.com/forms/d/e/1FAIpQLSfh2nMfpZzt1-EpTG3wkNZYzcyj6ytlxx-Lu7TqQ5Ah6kQSYorw/viewform>



Through this program you will have the chance to learn valuable analytical and laboratory techniques and have the chance to earn 400 level units. Many of the skills learned through this experience are usually associated with graduate level research and will give you a head start in the field upon graduation.

Please submit your application for Summer 2019 no later than 6/9/19

Best Regards,
Your Cal Poly Water and Energy Sustainability Training Team
Dr. Tryg Lundquist, Dr. Corinne Lehr, Shelley Blackwell, and Sara Leader

Agricultural Engineering Internship Job Description Freshway Farms, LLC.

Status: Level II Hourly; Part Time

General Job Description: The Freshway Farms (“FWF”) Agricultural Engineering Intern will gain a wide range of practical experience by designing systems to improve efficiencies in harvesting and other activities which will be implemented on existing machines.

Relationship to Others within the Company

- Reports to and receives assignments from the Production Coordinator and General Manager.
- Will work with outside Engineers, Food Safety Coordinator, and Ranch Supervisors in order to determine specifications and constraints for designs.
- Discussing with harvest crews to get input from those actually completing the work. The ability to speak Spanish is not a requirement but does help. If you do not speak Spanish, you will gain a lot of practice.

Primary Responsibilities

- Designing Systems using CAD and SolidWorks
 - o Work with Production Coordinator to determine where efficiencies in different operations can be achieved. Systems will aid workers in tasks to improve ergonomics and overall time to complete tasks.
 - o The systems designed will include both structural and hydraulic engineering.
- Materials - Purchasing/Layout
 - o Creating lists of materials and comparing quotes from different vendors.
 - o Ensuring that materials purchased will comply with food safety regulations as well as worker safety aspects.
 - o Work with Farm Shop to ensure that drawings and materials are clearly presented so that mechanics are able to fabricate in an efficient manner.
- Cost Analysis and Timelines
 - o Creating a cost analysis to determine if the designed system will be cost effective.
 - o Preparing fabrication and materials timelines so that projects can be completed in a timely fashion. These lists should include the following:
 - Materials lead/delivery times
 - Step by step project layout
 - Completion and testing dates

Primary Competencies

- Attitude: proactively looks for and proposes ways to improve operations; contributes to building a positive team spirit
- Attention to detail: pushing to ensure that detail is getting done; focused attention to detail
- Communication: Listens and gets clarification as needed; responds well to questions; remains open to others’ ideas or suggestions; proactively presents suggestions and ideas to improve operations as appropriate
- Dependability: takes responsibility for his or her own actions; keeps commitments
- Diligence: works to complete work required with a “whatever it takes” attitude
- Quality oriented: completes work in a timely manner; strives to increase productivity

Physical Requirements: Must have the ability to walk, talk, hear, see, speak, concentrate, and sit for lengthy periods of time, reach in all directions, stoop, bend and lift up to 40 pounds repeatedly throughout the day.

This job description is intended to describe the general nature of the work performed by employee(s) in this job. It is not an exhaustive list of all the job’s responsibilities. At Freshway Farms, all of our jobs include broad responsibilities for continually searching for and implementing ways to improve quality and profitability.

Contact: Ben Adam Email: Ben.freshway@gmail.com Cell: 805-260-9500