

From: [Macey Miyahara](#)
To: [coe-cee-ug-students Sympa List](#)
Subject: Civil Engineering Undergraduate Announcements – January 6, 2020
Date: Monday, January 6, 2020 10:16:43 AM
Attachments: [Flyer_Who Are You Exploring Identity & Diversity.pdf](#)
[2019-2020 Civil Engineering Internship Flyer.doc](#)
[NSF REU SST Flier 2020.pdf](#)
[image002.png](#)

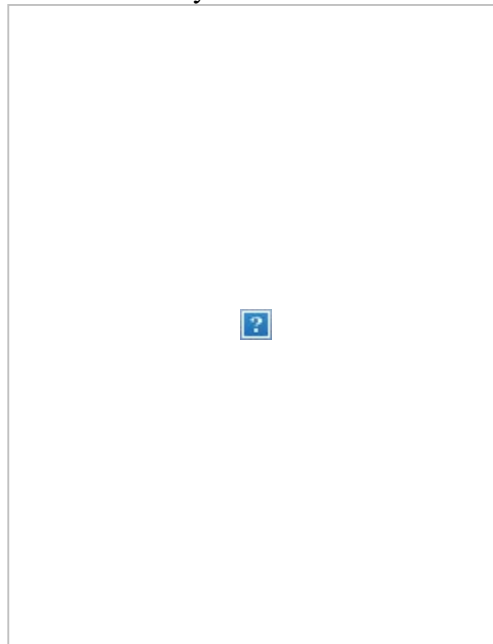
Civil Engineering Undergraduate Announcements – January 6, 2020

Happy New Year, everyone!

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2020 Diversity in STEM Conference

The Diversity in STEM Committee invites you to the
2020 Diversity in STEM Conference!



What is the 2020 Diversity in STEM Conference?

- An annual conference hosted by the Diversity in STEM Committee that provides a **networking lunch** with professionals and Professors, two different tracks (Professional and Graduate) of **workshops** on either *professional development* or *graduate school*, and a **career fair!**

Date: Saturday, January 25th, 2020 | **Time:** 10:00am-5:30pm | **Location:** ARC Ballroom A & B

Purpose of Conference:

- To honor the progress that has been made towards diversity and inclusion on campus, in the industry, and beyond.

Mission of Conference.

- To bring together marginalized students, industry representatives, and faculty members to cultivate community, enhance professional and personal skills, and to continue a dialogue around overcoming the barriers impacting marginalized individuals in STEM.

Some companies attending: Google, Sandia National Lab., Pepsico, Land O' Lakes, Northrop Grumman, Environmental Sciences Associates, Chevron, BioMarin, SMUD, US Army Corps of Engineers, and more which you can see on the registration page!

For more information and to register: <http://bit.ly/2020DISC>

Last day to register: Monday, January 13th, 2020

Note: You do not have to attend the whole conference.

BioDesign Challenge

It is a 2 quarter course, and both are required, but it's an amazing "mini-entrepreneurship" experience with background first in biodesign across different media, then team formation (biosci + design + engineering + other major or similar, teams of 4, interdisciplinary), problem to solve identification, then prototyping in Spring quarter with scientific experimentation, poster + video + 3D prototype. One team from the class gets a free trip to NYC for 5-6 days in mid-June to compete in the Biodesign Challenge against about 40 international teams...

www.biodesignchallenge.org

Winter:

Tuesdays 9am-noon (ask Christina for the CRN) - 4 units as DES 128 Biodesign Theory and Practice

Spring:

Fridays 9am-noon - 3 or 4 units as DES 198 for a grade (counts as a design studio course) or else as Honors 194 if an honor program student

BioDesign Challenge

In this unique pair of courses over two quarters, students will work closely with Design and Biology or Bioengineering faculty in a hands-on, cross-disciplinary course experience to produce and showcase innovative new products that are functional, elegant, and sustainable.

In the first quarter, teams of undergraduates and graduate students learn basic principles of BioDesign and develop their project ideas for a proposal, including an introduction to the lab work they'll need to get going in the next quarter. Then students put their approved plans in motion in the second quarter to create the novel designs, coupled with promotional materials such as videos, websites and product pitches. The series culminates in a local competition judged by UC Davis and visiting faculty as well as community experts such as designers and venture capitalists.



WINTER 2020
DES 128

T 9:00 AM - 11:50 AM
CRUISS 256
4 units
GE Credits: VL

Instructor(s):
Christina Cogdell

Above: The winning UC Davis team 'BioBndage' team presenting their biodegradable bandage design at the 2020 BioDesign Challenge. This year's winning UC Davis team will have most of their expenses paid for a trip to New York for the 2020 International Biodesign Competition.

U.C. DAVIS
University Honors Program
Office of Interdisciplinary Education

For CRN email Christina Cogdell: cgcogdell@ucdavis.edu.
Spring Quarter 2020 BioDesign will be held Fridays from 9:00 AM - 11:50 AM.

For more info, visit: honors.ucdavis.edu/courses

Who Are You? Exploring Identity & Diversity – First Year Aggie Connection

Who Are You? Exploring Identity & Diversity

CRN: 53968
Wednesdays
11:00-11:50am
1 unit, EDU098

This course explores some of the critical concepts of Diversity and Inclusion in the university setting and beyond as well as their connection to academic, social/cultural, personal and career challenges and resources associated with college success and leadership development. This course does not count toward the Education minor.

Please feel free to distribute this flyer and course announcement to any interested students. If you have any questions or concerns, please see the attached flyer or feel free to email kjparpana@ucdavis.edu.

The PAL Program



During the 2018-2019 academic year, the [Pal Program](#) partnered over 1000 undergraduate students who signed up to meet their peers from different countries and cultures for weekly in-person conversation sessions. By choosing to open themselves up to this unique experience, Pals created **lasting friendships**, improved their **social and language skills**, and acquired a greater sense of **cultural awareness**. We invite all undergrads to register to become a Pal this quarter and would appreciate your encouragement. Participation in the Pal Program is free and there are no prerequisites to join.

[STUDENTS CAN REGISTER HERE](#)

If you have any questions, please don't hesitate to contact us at palprogram@ucdavis.edu.

Smart Structure Technology REU Program

2020 NSF Research Experience for Undergraduates (REU) Site: Integrated Academia-Industry Research Experience for Undergraduate in Smart Structure Technology

Funded by National Science Foundation, San Francisco State University and the University of South Carolina are partnering with highly-acclaimed companies to offer undergraduate students an exceptional opportunity to participate in exciting research on smart structure technologies. Through the 10-week summer program, participants will be working with engaging professors and passionate engineering professionals on practical research projects in both academic and industrial environments.

Application Deadline: Feb. 14, 2020

Highlights:

- Program Period: June 1 – August 7, 2020 (10 weeks)
- Formal training, workshops, technical tours and local cultural activities
- Research experience through engagement in projects with scientific and practical merits in both academic and industrial environments
- Experience in conducting laboratory experiments and opportunities to connect with industrial professionals for future employment
- Summer research experience with a stipend of \$5000
- Subsidized housing and partial travel support

Who should apply?

- Students enrolled in a U.S. college or university as undergraduate (GPA > 2.5 based on a 4.0 scale)
- Highly motivated students interested in civil engineering research (previous research

- experience is not required)
- United States citizens or permanent residents (required by NSF guidelines)
- Able to show proof of health insurance for duration of the program

Apply Now: http://sdii.ce.sc.edu/reu_sst/

For more information please see the attached flyer.

Natural Hazards Engineering Research Infrastructure (NHERI)

The Research Experiences For Undergraduates (REU) program offers research opportunities at 10 multi-hazard engineering equipment sites during a 10-week summer research program.

Benefits of Participation

- WORK with experienced faculty and graduate students
- WRITE a professional, publishable research paper
- NETWORK with peers in research group meetings
- LEARN about graduate school and career development
- BUILD relationships through mentoring
- GAIN hands-on research experience

Flyer - https://www.designsafe-ci.org/media/filer_public/ad/41/ad41e03d-9de5-4b10-b241-265c2e048c37/2020_reu_flyer.pdf

Link to program - <https://www.designsafe-ci.org/community/news/2019/december/2020-nheri-reu-applications-now-open/?fbclid=IwAR1sJ0xcg0OXLILZzFmrjtQ5u-ZfcZIk8p38eN2evDyC41aIMzz0IucQIYM>

NHERI REU Summer Program

Applications are now open for the NHERI Research Experiences for Undergraduates (REU) program. The 10-week summer opportunity is open to U.S. citizens and permanent residents enrolled in an undergraduate degree program. We encourage all students interested in mitigating the effects of natural hazards to apply! The application will remain open until February 1, 2020 at midnight.

Details and online application here: <https://www.designsafe-ci.org/learning-center/reu/>.

Our most successful recruitment tool has been direct contact from faculty with potential student researchers. If you are a faculty member and know an undergraduate student who will benefit from participating in this summer research experience, encourage her or him to apply to the program. Your recommendation will make a big difference!

Please download and post the [program flyer from the DesignSafe website](#).

Questions? Please contact Karina Vielma, EdD, NHERI ECO co-administrator:
karina.vielma@utsa.edu.

Ampirical Solutions

Ampirical Solutions.

2295 Gateway Oaks Dr., Suite 100. Sacramento, CA 95833

Ampirical's prime client on the west coast/Sacramento area is PG&E. We design high voltage

power transmission lines for PG&E. As you are aware that PG&E has to perform a lot of work within the next two years in order to meet the wild fire safety program requirements, I need at least 2-3 civil or electrical engineers to perform this task. Work is not going to slow down after two years and will just grow, so the industry offers a lot of job security and rapid growth.

Engineer, Transmission & Distribution Line

Since 2006, Ampirical has provided comprehensive customer support, from project conception to design engineering, project management, and construction in electrical transmission and distribution. With over 70 years' experience combined in this industry alone, Ampirical's founders have a long history of fulfilling their mission in Engineering Power-ful Solutions.

SUMMARY

The Overhead Transmission & Distribution Line Engineer is responsible for the design of the electric transmission, sub-transmission, and distribution lines. This role will be responsible for the mentoring of junior Design Engineers and regular ongoing interface with the client at their offices, and occasionally in the field at walk-downs and site visits.

ESSENTIAL DUTIES and RESPONSIBILITIES

Direct and oversee work of junior Design Engineers:

Conceptual routes, layouts, preliminary and detailed designs and specifications for high voltage transmission lines and/or distribution lines

Plan and profile sheets, staking sheets, bills of materials, and stringing charts

Design criteria

Pole loading drawings, framing drawings, and construction drawings

Terrain models

Structure loading calculations

As-built revisions

Provide construction support

Review and provide quality assurance for project engineering deliverables developed internally or by third parties

Attend project site visits/walk downs

Interface regularly with the client at their offices or in the field

Support client's project engineers as directed

QUALIFICATIONS

REQUIRED

Bachelor's Degree in Engineering from an accredited engineering school. Civil or Electrical Engineering Degree strongly preferred.

Civil or Electrical PE License (or ability to obtain within 1 year)

Proficient in PLS-CADD and PLS-POLE.

Ability to prioritize work, manage tasks for multiple projects under budget, and time constraints.

High level of personal initiative and the ability to interact with personnel, clients, and contractors.

Strong problem solving and analytical skills and must be proficient on the computer.

PREFERRED

Experience with PLS-TOWER.
Familiar with CPUC GO-95 & 131-D

WORK ENVIRONMENT

The Overhead Transmission Line Engineer will report to more senior personnel for each project, will interface with other members of the department, and have a frequent interface with the client at their office. Travel out of town for short periods may be required by project and assignments.

Please send your resume to, ABDUL.SAFDAR@AMPIRICAL.COM

South Tahoe Public Utility District Internship

UNDER THE DIRECTION OF THE SENIOR ENGINEER THE INTERN WILL PROVIDE ASSISTANCE TO PROJECT MANAGERS AND CONSTRUCTION INSPECTORS ON VARIOUS ENGINEERING TASKS.

DUTIES:

- Development of AutoCAD drawings.
- Writing Project Specifications.
- Performing Engineering Calculations.
- Providing Permitting Assistance
- Reviewing Submittals
- Collecting and processing field data AND supporting construction inspection.

For more information on how to apply, please see the attached flyer.

Macey Miyahara

Civil Engineering Undergraduate Peer Advisor

civiladvising@ucdavis.edu