

# 2022 DS<sup>4</sup> Summer Program

*Diversity in STEM Summer Series for Sustainability*

**Date: June 13<sup>th</sup> - 18<sup>th</sup>, 2022**

*Monday-Saturday Overnight Program*

*Saturday end time 12pm*

## **Description:**

This one-week overnight summer program will bring together MESA students from across the state to learn about environmental sustainability in engineering from Pacific School of Engineering Professors. Students will then work together in competing teams to create sustainable engineering solutions to on-campus challenges. Each group will include 5 students and 1 student counselor from the Delta College or Pacific MESA University program. Each group of students will work together throughout the entire week to create a project prototype and presentation which they will present to faculty and facilities staff to evaluate for sustainability gains, design, and feasibility on the last day. Winning teams will receive \$700 in prize funds to divide among their teammates and the project will be built throughout the year with the help of Pacific MESA staff.

## **Participants:**

Incoming 11<sup>th</sup> grade (graduating 10<sup>th</sup> graders), incoming 12<sup>th</sup> graders, incoming freshmen (at Pacific)

Approximately 25 students (5 Teams of 5 students)

**Evening Activities** will be primarily social, and may include a movie night, eating out on the miracle mile, a games night etc.

## **Tentative Day Program:**

Monday	Time	Activity	Description
	8:30am- 9am	Check In	Registration/Light Breakfast
	9am – 10am	Welcome Introductions Teams	Elana & Rose
	10-12	Campus Tour Team Scavenger Hunt	Olivia Villareal
	12 – 1pm	<b>Lunch</b>	Bag Lunch- Rose and Elana
	1:00 – 2:00 pm	Introduction to projects and schedule for the week	Elana and Rose
	2:00-4:00	Microbit sensor coding	San Joaquin County of Education

Tuesday	Time	Activity	Description
	8:30 am – 9am	Check In	Overview of Agenda/ Light Breakfast
	9am – 10:30am	Trash Robots	Dr. Elizabeth Basha
	10:45 am – 12:15 pm	Sustainability at Pacific and designing sustainable projects	Kelsey Smith

	12:15 – 1pm	Lunch	Vouchers to DUC
	1 – 2:30 pm	Experimenting with Solar Cells	Dr. Rahim Khoie
	2:45-4:00	Systems Engineering	Create questions for facilities interviews Rose and Elana

Wednesday	Time	Activity	Description
	8:30 am – 9am	Check In	Overview of Agenda/Light Breakfast
	9am – 10:30 pm	Water engineering	Dr. Camarillo
	10:45-12:15	Representation in Engineering	Patricia Lopez
	12:15 – 1pm	Lunch	Vouchers to DUC
	1pm – 2pm	Interviewing Facilities	Talking to people in facilities about campus needs
	2:15pm – 4pm	Selection of Project	Decide on group project Create material list

Thursday	Time	Activity	Description
	8:30am – 9am	Check In	Welcome/Dean Remarks
	9am – 10:30 am	Civil Engineering	Dr. Saviz
	10:45-12:00	Projects	Work on projects with group
	12 – 1pm	Lunch	Vouchers to DUC
	1pm – 4pm	Projects	Work on projects with group

Friday	Time	Activity	Description
	8:30 am – 9am	Check In	Welcome/Overview of Agenda
	9am – 4pm	Projects	Complete and finalize projects and prototypes- Project presentations

Saturday	Time	Activity	Description
	8:30am – 9am	Check In	Welcome/Dean Remarks
	9am – 12pm	Competition/Awards and catered lunch with families	Recognize Winners/Teams Teacher Awards