EDUCATIONAL SERVICES

UCMERCED UNIVERSITY OF CALIFORNIA EXTENSION

EiE Engineering is Elementary®

PROFESSIONAL DEVELOPMENT SERIES

The Next Generation Science Standards (NGSS) now integrates engineering design into the structure of science education by raising engineering design to the same level as scientific inquiry when teaching science disciplines at all levels, for grades K-12

EiE units use pedagogical methods based on a social constructivist view of learning:
Contextual Learning and Problem Solving through engineering design challenges.
Collaborative Learning and Teamwork through small-group, collaborative work that encourages students to consider more than one solution.
Communication through encouraging students to share ideas in several ways: speaking, writing, drawing, and building.
Project-based Learning through analysis of their own data and making decisions about their designs, students take ownership of their learning.

DATE	TIME	SCIENCE TOPIC	PRIMARY DCI	GRADE
8/29/17	To Get To The Other Side: Designing Bridges	Balance and Forces	Physical Science	1-5
9/26/17	Now You're Cooking: Solar Design Oven	Energy	Physical Science	3-8
10/24/17	No Bones About It: Designing Knee Braces	Human Body	Life Science	3-8
11/14/17	Sounds Like Fun: Seeing Animal Sounds	Sound	Physical Science	K-2
1/30/18	A Stick in the Mud: Evaluating a Landscape	Land Form	Earth & Space Science	2-7
2/27/18	Taking the Plunge: Designing Submersibles	Density	Physical Science	5-8

BALANCE & FORCES
&
Civil Engineering
FOR ELEMENTARY STUDENTS

ONE UNIT OF CREDIT

per workshop is available from UC Merced Extension

(1 CEU for $40)

www.extension.ucmerced.edu

Register before August 18th
$125 Fee includes materials, light breakfast & lunch

Additional Information For Content:
Rosanna Ayers
rayers@mcoe.org For Registration:
Ana Moreno
amoreno@mcoe.org
209.381.5906

Audience:
Grades 1-5
Physical Science

Merced County Office of Education is pleased to offer:

DESIGNING BRIDGES: TO GET TO THE OTHER SIDE

EiE : Engineering is Elementary

Inquiry-Based STEM Curriculum, Project-based Learning, Collaborative Learning

This unit introduces the principles behind bridge design. Students will reinforce their understanding of "push" and "pull" as they explore how forces act on different structures.

WHEN: AUGUST 29th, 2017 9:00AM - 3:30PM
WHERE: 1850 Wardrobe Avenue, Building B4

REGISTER AT: http://merced.k12oms.org/83-135850

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