



CAL DAY

CIVIL AND ENVIRONMENTAL ENGINEERING

Schedule of Events

Saturday, April 16, 2011

ONGOING / DROP-IN EVENTS

9:00–3:00: **An Eye in the Sky, Memorial Glade Lawn**

We will fly a small airplane over Memorial Glade Lawn! Equipped with a camera, the plane will send pictures of our Cal crowd to your phones and laptops. Visit our tent at the McCone Hall Plaza to talk with the team.

An Eye in the Sky is a project of The Center for Collaborative Control of Unmanned Vehicles (C3UV), a group of UCB mechanical and civil & environmental engineers that focuses on the design and operation of unmanned vehicles.

10:00–3:30: **2nd Floor Bay, Davis Hall**

Pacific Earthquake Engineering Research (PEER). Design your own building and see how it will withstand an earthquake. PEER will provide building materials and a shake table for those who want to learn about creating a seismically-sound structure. Will your building crumble or stand tall?

Seismic Performance of Reinforced Concrete Beams

On display are two test beams that are part of an ongoing research project at Berkeley to evaluate current Building Code requirements of reinforced concrete beams. Talk to graduate students who are part of the research team. This is one example of Berkeley research that impacts the lives of people everywhere.

2:00–3:30: **Open Labs**

Concrete & Materials Lab Demonstration, 2nd Floor Bay, Davis Hall

Come by CEE's materials and concrete labs and see how we conduct structural and materials testing, and watch us demonstrate mixing concrete of low and high workability. All CEE undergraduates will conduct tests such as these when they take our required *Structure & Properties of Civil Engineering Materials*.

Go With the Flow: Fluid Lab Demonstration, 1st Floor O'Brien Hall

Come see first-hand the flow of fluids under various conditions in CEE's unique transparent fluid station. You will take part in these lab experiments when you take our required *Elementary Fluid Mechanics*.

Ecological Engineering in Action, 4th Floor O'Brien Hall

Learn how natural systems like ponds and wetlands can be used to simultaneously clean water and provide habitat for migratory birds. See actual treatment systems containing algae and cattails and talk with current students in our *Ecological Engineering of Water Quality Improvement* class who are monitoring the systems.

SCHEDULED EVENTS

10:00–11:00: **502 Davis Hall**

Info session: Civil & Environmental Engineering Program with *Department Chair Lisa Alvarez-Cohen*
What is it like to be a CEE student? Get the scoop on classes, research opportunities and tips on how to succeed in this major from the Chair and a panel of current undergraduate students.

12:30-1:30: **502 Davis Hall**

Earth Materials: Origins, Evolution, & Impacts on Society's Infrastructure with *Professor Juan Pestana*
Hear how the use of soil and rock have been at the center of human existence since the beginning of organized society. Understand how the behavior of these materials has resulted in major advancements in how we build things. What are the challenges ahead for how we use soil and rock?

1:30-2:00: **434 Davis Hall**

Liquefaction: When Earthquakes Turn Ground to Liquid with *Professor Michael Riemer*

The soil that lies between bedrock and a structure can control how an earthquake is felt—in some cases, even firm soil can be temporarily turned into a fluid, like quicksand. See how this can happen, and the potential effects on bridges, houses, and other structures.