UC Berkeley Community College Visit Day
Friday, October 18, 2013
9 am to 3 pm

9 - 10 am  Breakfast and Registration  Location: Bechtel Terrace

10 -10:10 am  Welcome  Location: 2 LeConte
Professor Oscar Dubon,
Associate Dean of Equity and Inclusion,
Professor, Materials Science & Engineering

10:10 -10:30 am  Engineering Overview
Dale Masterson, Director of Engineering Student Services

10:30 -11:20 am  Engineering Admissions
Mary Howell, Director of Advising & Policy,
Engineering Student Services

11:20 -11:40 am  Center for Energy Efficient Electronics Science & Transfer Alliance Project
Lea Marlor, Education and Outreach Program Manager (E3S)
Keith Schoon, Director TAP Program

12 -12:50 pm  Lunch with T-PREP Students  Location: Bechtel Terrace

1- 1:30 pm  Lab Tour #1

1:40 - 2:10 pm  Lab Tour #2

2:15 -3:00 pm  Moderator- Genie Foon, Adviser,
Engineering Student Services  Location: HP Auditorium
Soda Hall Room 306

3:00 pm  Evaluations and Raffle
Lab Visits – Each Student will visit 2 labs.

The Berkeley Institute of Design , Hearst Memorial Mining Building 3rd floor
BiD is a research group that fosters a deeply interdisciplinary approach to design for the 21st century, spanning human-computer interaction, mechanical design, education, architecture and art practice.

The CITRIS Invention Lab @ UC Berkeley, Tour Starts at the CITRIS Tech Museum, 3rd floor of Sutarja Dai Hall
This lab supports faculty, student and community innovation by providing the knowledge, tools and support to rapidly design and prototype novel interactive products, embedded sensing systems and integrated mobile devices. The new facility will be a vital piece of the CITRIS pipeline running from the minds of researchers through CITRIS laboratories, and into the markets, industries, and streets of the world.

Electro-Mechanical Design Lab, Etcheverry Hall Room 2136
The concept of INSTAR is to increase the efficiency of regenerative braking by increasing the power density of the hybrid system through the use of a flywheel as a “mechanical battery”. Flywheels are capable of much faster charge/discharge rates, and thus would be capable of filling in the areas where batteries fall short by providing high power density and efficiency for regenerative breaking and acceleration. Although flywheel energy storage systems have been researched for many years, there is still a need for the development of cost-effective, reliable systems. INSTAR seeks to develop an innovative, low-cost triple-hybrid (gasoline engine, electric motor, and mechanical flywheel) system that will have improved regenerative energy storage and acceleration when compared to traditional hybrids which employ only batteries in energy storage.

Medical Polymers & Biomaterials Group, Etcheverry Hall Room 2121
The aim of this lab is to develop technologies that improve longevity and structural function of orthopedic biomaterials. The lab’s research involves understanding the functionality of healthy cartilage, the processes of tissue degradation, and the development of novel materials that can provide relief to patients suffering from degenerative joint disease.

Teleimmersion Lab, Sutarja Dai Hall Room 133
Teleimmersion Lab includes facilities to support research in 3D stereo reconstruction, teleimmersion, motion capturing, remote monitoring, and human movement analysis. The primary goal of the lab is teleimmersion for which a teleimmersion apparatus with 48 cameras has been developed to capture 3D data of users with accuracy of about 1-2cm. The workspace of the accurately calibrated cameras is approximately 6' x 6' x 6' with precise hardware synchronization to allows simultaneous capture of images on up to 48 cameras. The cameras are connected to 12 servers which run the stereo reconstruction algorithm allowing full-body 3D reconstruction of user(s) inside the space with 15-20 frames per second (FPS). These can be delivered in real-time over the network to a local display or to a
remote location. Remote and local users can be displayed inside a virtual environment with synthetic virtual objects or data.

Fluid Lab, O'brien Hall Room 110
Come see first-hand the flow of fluids under various conditions in Civil and Environmental Engineering’s unique transparent fluid station. You will take part in these lab experiments when you take our required Elementary Fluid Mechanics