The UCLA Henry Samueli School of Engineering and Applied Science is inviting undergraduate Engineering students to apply for a paid undergraduate position for the inaugural year of the UCLA Engineering Transfer Student Summer Bridge Program. As an Undergraduate Mentor you will work on a team with a Graduate Student Facilitator to lead a week long technical design project.

The Transfer Student Summer Bridge Program Undergraduate Mentor position provides the unique opportunity to develop and deliver curriculum, hone your engineering design-skills, and develop the soft-skills that companies look for in hiring professional engineers.

About our Program:
The Transfer Bridge Program will provide an opportunity for select incoming transfer students to gain a competitive-edge in transitioning to UCLA Engineering, build a solid foundation that enables them to make the most of their UCLA Samueli experience, and level the ‘playing field’ in landing their first job or applying to graduate school after graduation.

Program Dates & Logistics:
2 weeks - September 4 – 18 (additional prep time required – see below)
10 – 7PM (tentative)
50 incoming transfer students (all majors)

Positions:
2 Graduate student facilitators
6 Undergraduate mentors

Supervisors:
Greg Pottie, Ph.D., Professor & EE Department Chair, Transfer Student Summer Bridge Faculty Director
Wes Uehara, Community College Outreach Coordinator, Transfer Student Summer Bridge Program Director

Components:
1. C++ and Matlab mock-classroom experience (universal content for all engineering majors).
   a. Led by Graduate Student Facilitators w/ support from Undergraduate Mentors
2. Short technical design project
   a. Led by Undergraduate Mentors, w/support from Graduate Student Facilitators
   b. Must utilize engineering design skills,
   c. Must include iterative design loop,
   d. Must include working on teams.
3. Professional development focused on 1st year success & networking opportunities
   a. Led by Program Director w/ support from Undergraduate Mentors & Graduate Student Facilitators

The overall goal of this program is to help incoming transfer students develop the skills necessary to perform in their classes in year 1. The boot camp setting will help familiarize them with the rigor of UCLA Engineering classes while introducing curriculum that they will learn during their first year. Solving problems together and networking with others in their cohort will provide them the resources to develop study groups in their first quarter. Finally, providing them with information on resources provided by the eTransfer Center and other student organizations will help them to more effectively access and connect once school starts.

About the Position:
Compensation:
$1620 - July – August | 4 hours/week - Weekly planning meeting + curriculum development
August 27 - 30 | 6 hours/day - Program prep (setting-up shop)
Job Duties & Responsibilities:

Planning & Prep:
1) Attend planning meetings through summer to prepare for the program.
2) Develop a technical project proposal that is accomplishable in 1 week for incoming transfer students with a broad range of experiences and skill-set. Proposal should include: a) a summary of the technical design project, b) an explanation of the iterative design process and how it will be tested, c) timeline, d) list of skills-workshops needed, e) budget that includes a parts list, and f) possible culminating competition/exhibition along with the metrics for evaluation.
3) Order parts and build a prototype as proof of concept.
4) Author the lessons, learning tools (powerpoint, video-tutorial, hands-on work), assignments (weekend homework) and skill-acquisition tools necessary for participants to accomplish their project.
5) Prep workspace and materials including preparation of SOPs, safety instructions, etc.
6) Attend any training (as needed).

Delivery:
1) Attend and assist with all Summer Bridge Program functions and activities; including:
   a. Planning meetings & undergraduate mentor trainings (if applicable), program prep, welcome & orientation, delivery of bridge program, lunch workshops, final culminating event & awards ceremony, and clean-up and evaluation.
2) Co-lead instructional workshops based on project needs.
3) Communicate daily objectives with program participants.
4) Communicate and implement assignments, challenges (daily, weekly, culminating, etc.) and provide feedback to participants.
5) Manage classroom space & maintain safety protocol.
6) Track project expenses and order materials/parts for projects.
7) Provide general guidance and mentorship to participants.
8) Participate in workshops covering the UCLA experience.
9) Provide feedback and assessment of students’ experiences to program supervisors.

Pre-requisites/requirements:
1) Experience working on a technical project that required use of engineering design tools and software.
2) Experience with the Engineering Design Process (design-build-test loop).
3) Must be able to fulfill all job duties and responsibilities; including attending all program events and have no other commitments during scheduled activities. Please check your schedule for availability.
4) Ability to identify and manage project deliverables, set a timeline, meet benchmarks, and evaluate outcome.
5) Incumbent should have excellent oral and written communication skills and ability to work well with students, faculty, and staff.
6) Must be a continuing undergraduate – enrolled in Fall 2018.
7) Minimum cumulative 3.0 GPA required.

Preferred:
1) Taken CS 32 or MAE/CEE M20.
2) Previous experience in teaching, working, mentoring, and motivating students.
3) Previous transfer student from a local community college and/or understanding of the transfer student experience and challenges.
4) Junior-level or above.
5) Experience working with traditionally under-represented communities in STEM (female, ethnic minority, 1st gen, non-traditional returning students, low-income).
6) Familiarity with UCLA resources and services.

Application Process & Deadline
1) Submit to Wes Uehara, wuehara@seas.ucla.edu, by Friday, June 22, 2018:
   a. Resume & cover letter – please include:
      i. Experience that evidences your ability to accomplish the aforementioned job duties/requirements.
ii. Any experiences working on project-based activities.

iii. What you hope to gain out of this experience and why you are interested in this position.

iv. Any experiences you have working with educational outreach activities such as this one and/or activities working with transfer students.

v. Students that will attend Transfer Bridge will come from varying backgrounds, communities and experiences. Discuss any experience you have working with diverse populations?

b. Letter of recommendation and/or list of references.

c. Available hours for interviews (M – F between 8 AM and 6PM) in the week of July 9.

If you have any questions or concerns regarding the application, position, or program, please email Wes Uehara, Transfer Bridge Program Director, at wuehara@seas.ucla.edu.