5 Academic Undergraduate Divisions

1. Henry Samueli School of Engineering & Applied Science
2. School of Theater, Film, & Television
3. College of Letters & Science
4. School of the Arts & Architecture
5. School of Nursing
What is Engineering?

- Engineers apply math and science to create, build, and design all things you see around us.

- Most importantly engineers solve society’s most important problems.
Most Important Engineer Traits

• Persistent problem solvers
• Know Math and Science so well, that they can APPLY it in new ways
• Applied Innovation and Creativity
• Practice the Engineering Design Cycle

Design → Build → Test → Innovation
1945  School of Engineering opened its doors

31,000  Alumni

5,000+  Students currently enrolled in HS-SEAS

9  Academic Programs
   - Aerospace Engineering
   - Bioengineering
   - Chemical Engineering
   - Civil & Environmental Engineering
   - Computer Science
   - Computer Science & Engineering
   - Electrical Engineering
   - Materials Science
   - Mechanical Engineering
# UCLA Global Ranking

## #8 in Best Global Universities

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>38,206</td>
<td>Total number of students</td>
</tr>
<tr>
<td>5,105</td>
<td>Number of international students</td>
</tr>
<tr>
<td>3,708</td>
<td>Total number of academic staff</td>
</tr>
<tr>
<td>698</td>
<td>Number of international staff</td>
</tr>
<tr>
<td>7,837</td>
<td>Number of undergraduate degrees awarded</td>
</tr>
<tr>
<td>3,013</td>
<td>Number of master's degrees awarded</td>
</tr>
<tr>
<td>1,394</td>
<td>Number of doctoral degrees awarded</td>
</tr>
</tbody>
</table>

United States News & World Report 2016
Industry Recruitment

- Hands-on technical experience and practical application of math and science knowledge is highly valued by US institutions and companies.
- UCLA Engineering students gain this technical experience here and go on to work at some of the top US companies:
  - Google, Intel, Yahoo, Aerospace,
  - Broadcom, Chevron, Lockheed Martin, Raytheon,
  - LA Department of Water & Power, Verizon, AT&T, Bloomberg L.P.,
  - Microsoft, WhatsApp Inc., Samsung, SanDisk, Amazon Lab1256,
  - Cisco, Dropbox, Sony, Toyota, Ebay, Alcoa, etc.
Success of UCLA Alumni

- **Vint Cerf**, Google Chief Internet Evangelist: M.S. ‘70, Ph.D. ‘72
- **Linda Katehi**, Chancellor of UC Davis: M.S. ‘81, Ph.D. ‘84
- **Ronald Sugar**, former Chairman and CEO of Northrop Grumman: Ph.D. ‘71
- **Jack Gifford**, co-founder of AMD: B.S. ‘63
- **Klein Gilhousen**, co-inventor of CDMA technology and co-founder of Qualcomm: B.S. ‘69
- **Allen Adham, Michael Morhaime, & Frank Pearce**, co-founders of Blizzard Entertainment: B.S. 90
- **Henry Samueli**, co-founder and CEO of Broadcom Corporation: B.S. 75, M.S. 76, Ph.D. 80
Henry Samueli

- Co-founder, chairman of the board, and chief technology officer of Broadcom Corporation.
- Broadcom Corporation is an American fabless semiconductor company in the wireless and broadband communication business.
- Broadcom supplies the WiFi+Bluetooth combo chip for Apple iPhone.
- In 2012, Broadcom had a $8.01 billion USD revenue.
- Professor at UCLA School of Engineering.
- UCLA School of Engineering and Applied Science was renamed after Samueli when he donated $30 million USD in 1999.
- 2013 net worth of 1.7 billion USD.
Approximately 24,306 students applied – 21,335 First year students applied 2,914 were admitted (13.7% admission rate)

2971 Transfer students applied 324 were admitted (10.9% admission rate)
Perfect SAT & GPA

How can I be competitive when applying to UCLA?
High School Preparation

Get hands on technical engineering program experience:

1. Work on real world engineering projects
2. Learn and practice the engineering design cycle

*Strong university applications essays include relevant hands-on experience
Overview

3 Week Intensive Pre-Engineering Summer Program

• For international high school students hosted at UCLA Engineering,
• Participants test their math & science skill on 2 engineering design challenges,
• Learn engineering concepts from UCLA Engineering students and faculty,
• Design, build, and test a prototype for competition judged by our mentors,
• Experience campus-life by living in our dorms and working at UCLA Engineering.
Sample Project: Circuit Design

Explore students learn about how to apply circuit design to an electrical challenge.
Sample Project: Bridge Design

Participants utilize 3D modeling software to design and build their bridge projects.
Program Components

1. **Technical Challenge**
   - 2 projects culminating in design competition

2. **Engineering Pathways Workshops**
   - Engineering Disciplines & History of Engineering
   - Life of a UCLA Engineering student
   - UCLA Engineering Admissions
   - Composing content for college applications

3. **Tech Talks**
   - Engineering Faculty Tech Talk
   - Industry Tech Talk

4. **Evening Social & Leadership workshops**
   - With domestic students

5. **Final Exhibition & Cultural Exchange**
Sample Day (Monday – Friday)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>Wake-up &amp; get ready</td>
</tr>
<tr>
<td>8:00 – 8:30 AM</td>
<td>Breakfast <em>(UCLA dorm dining hall)</em></td>
</tr>
<tr>
<td>9:00 – 12:00 PM</td>
<td><em>In lab – technical tutorial</em></td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td><em>Lunch</em></td>
</tr>
<tr>
<td>1:00 – 4:00 PM</td>
<td><em>In lab – project work</em></td>
</tr>
<tr>
<td>4:00 – 5:00 PM</td>
<td>Walk back to dorm &amp; journal entry</td>
</tr>
<tr>
<td>5:00 – 6:00 PM</td>
<td><em>Dinner</em></td>
</tr>
<tr>
<td>6:30 – 9:30 PM</td>
<td><em>Social, leadership, and cultural exchange with domestic students</em></td>
</tr>
<tr>
<td>10:00 PM</td>
<td><em>Floor curfew (check-in with residential assistant)</em></td>
</tr>
<tr>
<td>11:00 PM (12:00 AM)</td>
<td><em>Bed check &amp; lights-out (Friday &amp; Saturday curfew)</em></td>
</tr>
</tbody>
</table>

* 3 days will be designated preparation time for final presentation
Tour

UCLA Engineering

UCLA ENGINEERING AMBASSADORS
Facility Tour & Student Experience

UCLA
KLEINROCK INTERNET
HISTORY MUSEUM
Birthplace of the Internet

UCLA
STUDENT CREATIVITY CENTER
Technology Sandbox

William Herrera, Director of Engineering Science Corps Outreach Programs | UCLA Engineering 20
Experience
Campus Culture

UCLA
JOHN WOODEN CENTER
Campus Recreation

UCLA
ON THE HILL
UCLA Housing

DINING HALL
Most Vegan-Friendly College, 2010
#5 Best College for Food, 2013
Within Walking Distance of UCLA

Westwood: Stores and Eateries
Weekend Excursions

Saturday: Cultural Exchange
Sunday: All Day Event

Santa Monica, Magic Mountain, The Grove
Final Exhibition & Cultural Exchange

1. **Technical presentation**
   teams will deliver a presentation on their design project

2. **Design & competition awards**
   judged by UCLA Engineering faculty and staff

3. **Graduation**
   certificate of completion signed by our Dean

4. **Talent show**
   cultural exchange

*Video footage of event will be available for mom and dad*
Explore Engineering is our newest pipeline program
Thank you for your time.