



## School of Engineering Dean's Office of Student Affairs

135 Jen-Hsun Huang Engineering Center

Science & Engineering Quad (SEQ)

(at G-6 on Stanford University Map)

**In 1891** Jane and Leland Stanford incorporated engineering into the original Stanford curriculum because they foresaw that there would be an extensive need for engineers in the West and wanted to provide a practical education for pioneer families. Civil and Mechanical Engineering were the first engineering programs introduced when Stanford opened in 1891; Electrical and Mining Engineering were added the following year. Even though Stanford incorporates the whole spectrum of academia, engineering remains a favored field.

**Today** Stanford Engineering is building on a foundation of innovation that has extended nearly a century, creating pivotal technologies that transformed the worlds of information technology, communications, medicine, energy, and beyond. The faculty, students, and alumni of Stanford Engineering have established thousands of companies and laid the technological and business foundations for Silicon Valley. Founded in 1925, the School has a tradition of pursuing multidisciplinary collaboration aimed at solving the most pressing global problems.

### Stanford Engineering at a Glance

- ❖ Nearly 4,500 undergraduate and graduate-level students; about 30 percent of declared undergraduate and 40 percent of graduate-level students on campus are engineers
- ❖ More than 245 faculty members
- ❖ More than 80 labs, centers, and affiliate programs involving students in research
- ❖ Nine departments and 16 programs of undergraduate study; see reverse page for listings

**Onward:** Our students gain an unrivaled education in the fundamentals of their chosen engineering disciplines, enjoy opportunities to learn and conduct research in a multidisciplinary environment, pursue solutions to global challenges, and benefit from the proximity of Silicon Valley. Students can reach far beyond areas traditionally associated with engineering to address challenges in areas of health, energy, and environmental sustainability. In 2012, for example, contributions by Stanford engineers ranged from finding a way for smart phones to pinpoint clean water to finding clues for new depression treatments to creating “peel and stick” solar cells.

### Tour the Jen-Hsun Huang Engineering Center

Collect a copy of the *Jen-Hsun Huang Engineering Center Self-Guided Tour* at the computer kiosk in the first floor lobby or in Suite 135. Be sure to visit the student-oriented space on the lower Terrace Level; here you can peek in the windows of our student workshop, observe students studying together, or look into glass-walled labs located on the corridor that links Huang with the Spilker Engineering & Applied Sciences building to the North.

### Undergraduate and Graduate Engineering Programs

For details on UG engineering major programs, pick up a copy of our *Handbook for Undergraduate Engineering Programs* in 135 Huang or view it online at [ughb.stanford.edu](http://ughb.stanford.edu). For information on **graduate programs**, visit the various departments (see reverse page for a contact name and location) or link to departmental websites from [engineering.stanford.edu](http://engineering.stanford.edu). All nine engineering departments and the Institute for Computational & Mathematical Engineering (ICME) offer graduate degree programs. Students interested in graduate studies within the School of Engineering should apply directly to a particular program or department; undergrad candidates apply directly to the University, not to the School.

*The Mission of the School of Engineering is to “Seek solutions to important global problems and to educate leaders who will turn great ideas into real changes that will make the world a better place.”*

**SoE Departmental Majors\*****Aeronautics and Astronautics (AA)****250A Durand [H-6] — Patrick Ferguson**

Structural, aerodynamic, guidance &amp; control, and propulsion problems of aircraft and spacecraft

**Bioengineering (BioE)****Shriram 119 [G-6] — Teri Hanks**

A fusion of engineering, the life sciences, &amp; medicine

**Chemical Engineering (ChE)****Shriram 129 [G-7] — Pamela Dixon**

Fundamental knowledge and pioneering technologies in chemical science &amp; engineering

**Civil Engineering (CE)****316 Y2E2 in SEQ [G-6] — Jill Filice**

Design, construction and management of sustainable buildings and infrastructure

**Computer Science (CS)****193 Gates [F-7] — Meredith Hutchin**

The science of computing in a wide-ranging field of focus areas

**Electrical Engineering (EE)****177 Packard [F-6] — Amy Duncan**

Combining the physical &amp; mathematical aspects of electronics for advanced systems

**Environmental Engineering (EnVE)****316 Y2E2 in SEQ [G-6] — Jill Filice**

Assess &amp; develop solutions to environmental issues impacting the biosphere, land, water, and air quality

**Management Science and Engineering (MS&E)****114 Huang in SEQ [G-6] — Lori Cottle**

Plan, design, and implement complex economic and technological management systems

**Materials Science and Engineering (MatSci)****111A Durand [H-6] — Kevin Gribble**

Study the relation between the structure, processing, and properties of materials

**Mechanical Engineering (ME)****Bldg 530, Rm 125 [H-8] — Kelly Guerriero**

Conceptualization, analysis, design, and fabrication of mechanical devices, processes, and systems

**Interdepartmental Majors in Engineering\*****Architectural Design (AD)****316 Y2E2 in SEQ [G-6] — Jill Filice**

Blending architectural design with cutting-edge engineering technologies

**Atmosphere and Energy (AE)****316 Y2E2 in SEQ [G-6] — Jill Filice**

Study of fossil fuel and sources of renewable energy to provide students with the fundamental background necessary to create efficient energy systems.

**Biomechanical Engineering (BME)****Bldg 530, Rm 125 [H-8] — Kelly Guerriero**

Integrates biology and clinical medicine with engineering mechanics and design

**Biomedical Computation (BMC)****135 Huang in SEQ [G-6] — Darlene Lazar**

Combines biology, medicine, and computer science in a cutting-edge interdisciplinary degree

**Engineering Physics (EPHys)****135 Huang in SEQ [G-6] — Darlene Lazar**

Combines physics and mathematics with engineering design and problem-solving skills

**Product Design (PD)****Bldg 530, Rm 125 [H-8] — Kelly Guerriero**

Mechanical engineering with a focus on product conception and design

**Individually Designed Majors in Engineering (IDMEN)****135 Huang in SEQ [G-6] — Darlene Lazar**

Design your own program in an area not covered by existing majors

*No separate application is needed to declare a major in engineering at Stanford; see UG Admissions for the University application process at <http://admission.stanford.edu/>*

**Find details on SoE programs in***The Handbook for Undergraduate Engineering Programs*| <http://ughb.stanford.edu> |*\*Bracketed code indicates location on map*

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