The challenges facing the world are great and growing more complex by the day. Addressing the concerns of human health, environmental sustainability and energy in the coming century will require bold solutions that reach beyond traditional modes of research and teaching.

Stanford’s new Science and Engineering Quad (SEQ) responds to these challenges head-on by uniting many disciplines—earth sciences, engineering, humanities and sciences, law and policy, medicine and the Dean of Research—in close proximity to encourage the kind of collaboration and tangential thinking necessary to solve today’s most pressing global problems.

The CENTER FOR NANO SCALE SCIENCE AND ENGINEERING
Research at the atomic level benefits many applications—from new drugs to novel semiconductors, improved communication networks to water purification. The primary features of the 100,000-square-foot Nano Center, which opened in 2010, are highly specialized laboratories that tightly control or eliminate noise, vibration and light.

Points of Interest in Nano:
• Glass-walled labs on the first two floors that provide glimpses into cutting-edge research in progress.
• A display honoring Silicon Valley pioneer Ed Ginzton, whose contributions to klystron technology, radar and linear accelerators profoundly impacted physics, radar technology and medicine.
• An example of an early klystron tube, a linear-beam vacuum tube that revolutionized radar during World War II.

BUILDING 4
The final building in the quad will be completed in 2014. At 208,000 square feet, it will house the bioengineering and chemical engineering departments, which are currently dispersed in several other buildings on campus. The building will be the largest of the four SEQ structures and will feature specialized labs and offices for faculty, students and administration.

Science & Engineering Quad Operations
Spaces / Scheduling / Services http://sequad.stanford.edu

The Science and Engineering Quad (SEQ) is an integrated complex designed to advance world-changing research and teaching at the intersection of disciplines. With a rich blend of Stanford architectural tradition and environmentally sustainable design, the SEQ is a modern tribute to the historic Main Quad just a short walk away.
ARCHITECTURE
Designed by Boora Architects to meet the needs of 21st century teaching, research and sustainability, the SEQ connects via a palm-lined lane to the renowned Main Quad. The new buildings set a modern tone that looks forward as it recalls the legacy of Stanford's original sandstone facades and arch-lined arcades.

The Jen-Hsun Huang Engineering Center, with its octagonal rotunda, occupies the SEQ in the southeast corner. In the southwest corner is the Jerry Yang and Akiko Yamazaki Environment and Energy building, also known as Y2E2. In the northeast corner is the Center for Nanoscale Science and Engineering. In 2014, the final building will become home to the bioengineering and chemical engineering departments, completing the SEQ.

INTERIOR DESIGN
The interiors of all SEQ buildings include many open, light-filled common spaces that encourage informal encounters and conversations. The buildings also house formal meeting and event spaces, including 55 glassed conference rooms of various sizes, most with audio/visual equipment. Stanford faculty, staff and students may reserve these rooms for technical meetings and symposia, speaker series, career fairs, small group meetings and other Stanford-sponsored activities.

Sustainable Features
SEQ buildings meet stringent sustainability standards. Each building uses just half the power—and one-tenth the water—of a structure of comparable size. Banks of solar panels sit atop the roofs, and instead of traditional air conditioning units, central atria act as the “lungs” for the buildings, with windows that open each evening to circulate air for the day ahead. The windows also harvest and funnel natural light, efficiently lighting interiors and minimizing the need for electricity.

Additional green features include:
- Thick, carpet-free concrete floors that act as a thermal mass to moderate temperatures inside.
- Many open offices that require no individual temperature controls.
- Renewable and repurposed materials: bamboo finishes and reclaimed redwood trellises.
- Desks and shelves made of recycled particle board and bamboo veneer.
- Refurbished seats in the NVIDIA Auditorium.

THE JERRY YANG AND AKIKO YAMAZAKI ENVIRONMENT AND ENERGY BUILDING (Y2E2)
The 166,000-square-foot Y2E2 building, which opened in 2008, was the first structure in the SEQ. It was made possible by Stanford trustee and Yahoo! co-founder Jerry Yang, BS ’90, MS ’90 Electrical Engineering, and his wife Akiko Yamazaki, BS ’90 Management Science & Engineering. Y2E2 is occupied by engineers, anthropologists, physicians and lawyers grouped in cross-disciplinary focal areas—freshwater, land use and conservation, oceans and estuaries, and sustainable built environments—rather than by school or department.

Points of Interest in Y2E2:
- “1,000 Decisions,” a list of green design elements displayed on the walls and stairwells of the Red Atrium.
- Coupa Café, a gourmet eatery and coffee shop.
- Massive satellite photographs of Earth mounted on the walls of the atria, a constant reminder of the scale of the work underway in Y2E2.

THE JEN-HSUN HUANG ENGINEERING CENTER
Home to the School of Engineering, the 130,000-square-foot Huang Engineering Center has the most social and meeting space in the SEQ. Jen-Hsun Huang, MS ’92 Electrical Engineering and co-founder and CEO of NVIDIA, and his wife, Lori, provided the lead gift for creation of the center.

Points of Interest in Huang:
- The Forbes Family Café, a gathering spot featuring Ike’s Place, a popular sandwich shop, and Coupa Express, selling Stanford apparel, grab & go food and beauty aids.
- “The wormhole,” a video-conference station connecting Stanford to MIT.
- The HP Garage, a full-scale, glass model of the garage where Dave Packard and Bill Hewlett founded their iconic company.
- The very first Google server, a display with the server’s processors and hard drives encased in colorful Lego™ blocks and translucent plastic.
- The Terman Engineering Library, a unique repository in which only those books and journals in greatest demand are available on-site, with the remainder stored online or available in hardcopy for next-day delivery.
- “Room 36,” a model shop where students and faculty explore, share, create and turn their ideas into hands-on prototypes.
- The Mackenzie Room, a versatile space that can be configured for conferences and large gatherings and provides commanding views of the campus.
- NVIDIA Auditorium, a 300-seat auditorium with sophisticated audiovisual technology for broadcasting distance-learning courses.