



CAL POLY

Bailey College of
Science & Mathematics

OVERVIEW, HISTORY AND GALLERY

WARREN J. BAKER CENTER FOR SCIENCE AND MATHEMATICS



The Heart of Campus

Located in the heart of campus, the award-winning Baker Center provides transformational Learn by Doing features: ample study spaces encouraging teamwork and close student-faculty interaction, advanced instrumentation in labs rarely available to undergraduates, and studio classrooms integrating lecture and lab so students can actively discover science. It is a modern 189,000-square-foot building that every Cal Poly student will take a class in, demonstrating how science and mathematics is central to the university's polytechnic curriculum.

Cal Poly's Baker Center houses:

- Instructional and research facilities for chemistry and biochemistry, physics, and soil science
- University classrooms
- The Kenneth N. Edwards Western Coatings Technology Center
- Department offices for Physics, Chemistry and Biochemistry, and Natural Resources Management and Environmental Sciences
- Student spaces
- Faculty offices

A Foundation for Excellence

Every Cal Poly student will take a class in the Baker Center, giving them an excellent foundation in science and mathematics that will allow them to pursue innovative projects in their majors.

Vision

The vision is about our students, supporting exemplary approaches to teaching and learning, fostering teamwork and community and establishing a unifying and defining landmark for Cal Poly. The Baker Center is essential to Cal Poly's ability to continue a leadership role in educating students for careers in science, technology, engineering and mathematics. Consistent with our Learn by Doing philosophy, the Baker Center will transform the Cal Poly campus and the way science and mathematics are taught and learned. The building reflects the college's vision by providing an environment that inspires curiosity and encourages teamwork in the teaching and learning process.

Crossroads

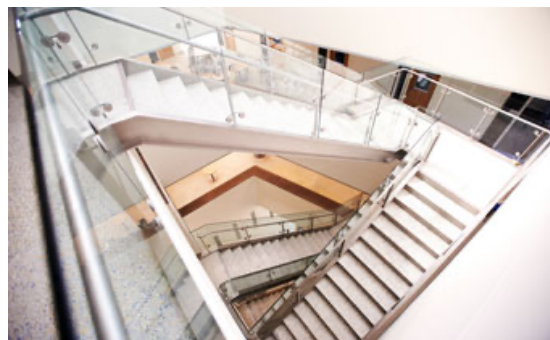
The Baker Center is a place of extraordinary inspiration and beauty. With the open and welcoming Baker Plaza and Lawn to its south and the new William and Linda Frost Center for Research and Innovation to its north, the Baker Center has become a unifying and defining campus landmark. Just as science and mathematics are central to the polytechnic curriculum, pedestrian pathways from the residence halls, public transportation, the University Union, campus dining facilities, and the bookstore, all lead to the Baker Center and the Frost Center, branching symbolically into corridors leading to the professional colleges.

Located symbolically at the geographic center of the Cal Poly campus, the Baker Center is Cal Poly's second largest building and one of its most inviting, a place of comfort, beauty, intrigue, and inspiration. The Center provides a graceful landmark on the northwest corner of Via Carta and Inner Perimeter.

Design

The Baker Center consists of a six-level central structure devoted to offices and student spaces with wings on either side that house classrooms and laboratories. The central entrance on Level Two connects to Centennial Park on the south side and to a major pedestrian artery on the north. These entrances access offices and conference rooms for chemistry and biochemistry, physics and earth and soil science.

Stacked above in Levels Three through Six are faculty offices and generous student study spaces. In addition to this main entrance, there are two additional entrances, Level One on the west end for the University classrooms and Level Three on the east end. The Baker Center replaces the north wings of the current science building affectionately known as the Spider Building and is at the center of the Cal Poly campus.



Namesake: Warren J. Baker

The building is a testament to the vision of its namesake, President Emeritus Warren J. Baker. Across the three decades of Baker's presidency, his leadership inspired faculty, staff, students, and supporters to transform Cal Poly into the nationally recognized comprehensive polytechnic university it is today.



With visionary leadership, Baker engaged industry leaders, the state legislature, and alumni and friends of the university in supporting this Learn by Doing approach. He understood that California and the nation needed professionals ready to contribute to their industries on day one and knew that Cal Poly graduates would deliver.

It was fitting to name this innovative facility after Baker because both transformed Cal Poly.

Warren J. Baker, Cal Poly's eighth overall and second-longest serving leader, died Friday, Oct. 7, 2022, at the age of 84 years. The Bailey College community is grateful for his influence and impact on our students, faculty and campus.

[Read more about President Emeritus Baker's life and career.](#)

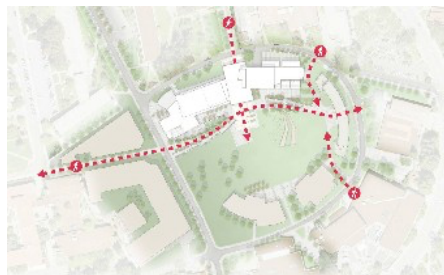
Funding

The \$119 million, 189,000-square-foot building was made possible by voter-approved state education construction bonds and \$19 million in private donations to Cal Poly.

Photos

[View photos of the award-winning Baker Center.](#) Photo galleries begin with the groundbreaking ceremony and continue through current classroom scenes. (Photos on this page by Brittany App and Joe Johnston.)

Building Information



- Total Assignable Area: 110,000 Square Feet
- Total Gross Area: 187,000 Square Feet
- Building Efficiency: 59%

Allocation of Occupied Space:






- University Classrooms - 7.3%
- Studio Classrooms, Instructional Labs / Technical Space:
 - a. Chemistry and Biochemistry - 33.8%
 - b. Physics - 20.9%
 - c. Soil Science - 4.5%
- Student/Faculty Research Space - 7.7%
- Kenneth N. Edwards Western Coatings Technology Center - 5.6%
- Student Interaction Space - 9.6%
- Faculty Offices / Administrative Support - 10.6%

Sustainability in Action

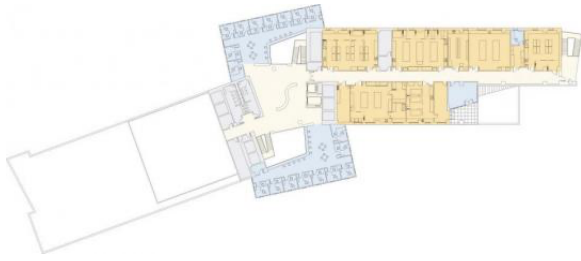
The Baker Center exemplifies flexibility, sustainability, and efficiency in its design. Cal Poly students will be inspired by the respect for the environment, energy, and natural resources demonstrated in the building's design and construction and will be able to monitor resource utilization through visual real-time displays.

- **Forest Stewardship Council Certified Wood:** The laboratory casework is certified by FSC. This ensures the sustainable logging of trees and use of plantation grown wood.
- **Recycled Content:** Recycled steel is used for structural framing. Fly ash is used in the concrete.
- **Water-Use Reduction:** High efficiency plumbing fixtures and waterless urinals conserve water, and stormwater for non-potable applications is re-used.
- **Natural Ventilation:** Operable windows improve the occupant comfort, and radiant floors cool and heat office space efficiently without unnecessary fan power.
- **Laboratory Active Monitoring System:** Laboratories are actively monitored for pollutants to maximize both safety and efficiency. Chilled beams provide efficient wet laboratory cooling.
- **Building Monitoring System:** Data on the various uses of the building is collected and displayed in an artistic manner through flat screen monitors.
- **Green Roofs:** Intensive and extensive roof gardens mitigate the building temperature, increase the lifespan of the roof, create new wildlife habitat, and mitigate stormwater runoff volume.
- **Rainwater Harvesting:** Intensive and extensive roof gardens mitigate the building temperature, increase the lifespan of the roof, create new wildlife habitat, and mitigate stormwater runoff volume.
- **Natural Daylighting and Views:** The local micro-climate and views are honored by using filtered direct sunlighting in public spaces with strategic glass placement.
- **Use of Regional Materials:** The stone used is from local quarries, and the concrete contains local aggregates.
- **Native Low-Water Landscaping:** Sustainability features with asterisks do not have a funding source at this time, and are contingent on the kindness and generosity of our donors.

Floor Plans

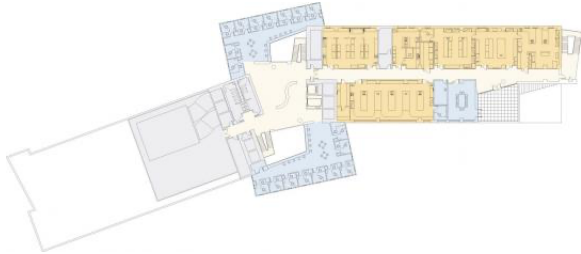
-  Laboratory
-  Laboratory Support
-  Office / Interaction
-  Lecture / Classroom
-  Circulation

The Baker Center consists of six levels. The central portion contains offices and student spaces, and the east and west wings house classrooms and laboratories.



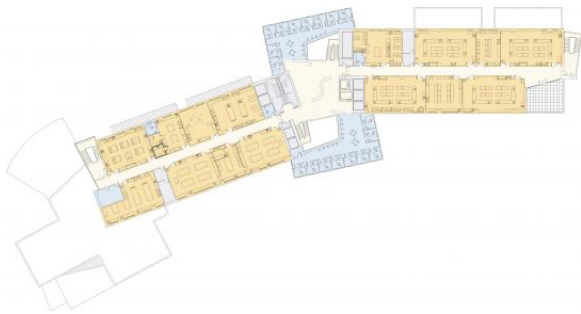
Level 6

Level 6 floorplan shows classrooms in the west wing; offices and circulation in the center; and laboratories with some offices in the east wing.



Level 5

Level 5 floorplan shows classrooms in the west wing; offices and circulation in the center; and laboratories with some offices in the east wing.



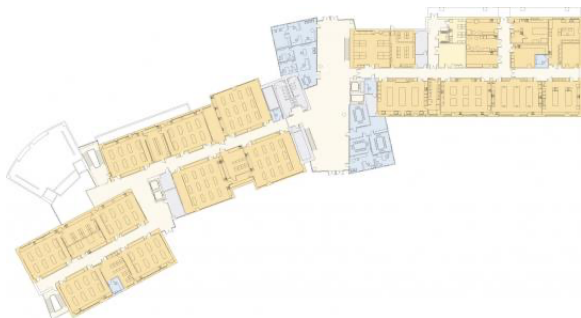
Level 4

Level 4 floorplan shows mostly laboratories, with classrooms and offices in the west wing; offices and circulation in the center; and laboratories with some classrooms and offices in the east wing.



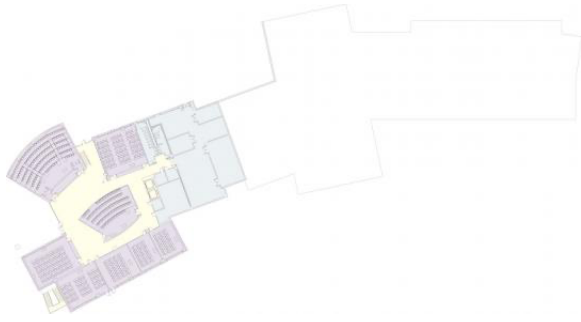
Level 3

Level 3 floorplan shows mostly laboratories, with classrooms and offices in the west wing; offices and circulation in the center; and laboratories with some classrooms and offices in the east wing.



Level 2

Level 2 floorplan shows mostly laboratories, with classrooms and offices in the west wing; offices and circulation in the center; and laboratories with some classrooms and offices in the east wing.



Level 1

Level 1 floorplan shows large classrooms and studio space in the west wing; the building center and east wing begin on Level 2 above.