



FUN FACTS

- ▶ Caltech founding fathers George Ellery Hale, Robert Andrews Millikan and Arthur Amos Noyes were affectionately known as the “Tinker, Thinker and Stinker”.
- ▶ Caltech is a certified olive oil distributor. Every year, the campus produces over 2,000 pounds of olives from trees on the famous “Olive Walk.” The Annual Olive Harvest Festival takes place in November.
- ▶ A small Prank Fund and a designated advisor/co-conspirator help enable the more creative passions of the Techer.
- ▶ Caltech Y sponsors a packed calendar of social and cultural events, service projects forums and wilderness outings. A small sampling: Alternative Spring Break, Make-A Difference Day, International Week, the Social Activism Speaker series, the Y hike in the Sierras and the Washington, D.C. science policy trip.
- ▶ Every Halloween night, students dunk pumpkins in liquid nitrogen and drop them from Caltech’s tallest building (Millikan Library) during the annual “Pumpkin Drop”.
- ▶ The Museum of Hoaxes website published a list of the top 10 college pranks of all time. Caltech is the only school to be listed twice!
- ▶ Caltech alumna Sandra Tsing Loh, B.S. ‘83 hosts her own science-themed radio show, “The Loh Down on Science”.
- ▶ Famed Caltech faculty member Richard Feynman’s memoirs, *Surely You’re Joking, Mr. Feynman!*, spent 14 weeks on the New York Times bestseller list.
- ▶ On February 22, 2011, Caltech’s men’s basketball team beat Occidental College 46-45, ending a 310-game conference losing streak!
- ▶ Caltech and the Southern California Institute for Architecture are competing together as one of twenty teams selected for the U.S. Department of Energy’s prestigious 2011 Solar Decathlon in Washington, D.C. Collegiate teams are challenged to design and build solar-powered, net-zero energy homes in the most efficient, attractive and affordable manner.
- ▶ Chemical Engineering professor Mark Davis is not just known for his pioneering work in chemical synthesis and nanomedicine—he’s also known for his speed. Davis, at the age of 55, received gold medals at the World Masters Athletics Championships in the 400m, the 4 x 100m relay and the 4 x 400m relay, along with a bronze in the 200m dash.
- ▶ Chemistry professor Jackie Barton was awarded the National Medal of Science in 2011 for experiments that revealed how DNA repair proteins locate DNA lesions. Dr. Barton is the 56th Caltech professor to be so honored.

AFTER CALTECH

Each of Caltech’s undergraduate academic programs provides an educational foundation that allows its graduates to pursue advanced education and/or careers in research and professional practice in many areas, especially in industry, academia, national laboratories, or business.

- Percentage of students who entered graduate school (2012): 54%
- Most popular graduate and professional schools (2012): Stanford, UC Berkeley, MIT, UC San Diego, Princeton, Caltech, Carnegie Mellon
- Percentage of students pursuing industry careers (2012): 24%
- Number of employers actively recruiting Caltech students on campus (2011-2012): 150-200
- These companies hired more than one graduate from those graduating in 2012: Microsoft, Facebook, Epic Systems Corporation, Oracle
- Additional employers (2012): Boeing, Bloomberg L.P., Honda and the Resnick Institute
- Average starting salary: \$82,000

VISIT US

The Undergraduate Admissions Office offers tours and information sessions every weekday. For more information on visiting campus, please see admissions.caltech.edu/visiting.

CONTACT INFORMATION

Undergraduate Admissions Office
383 S. Hill Ave.
Mail Code 10-90
Pasadena, CA 91125

Phone: 626-395-6341
Fax: 626-683-3026
Email: ugadmissions@caltech.edu
Web: admissions.caltech.edu



Caltech

2012-2013 FACT SHEET



THE CALIFORNIA INSTITUTE OF TECHNOLOGY

Caltech is dedicated to research and education in science, mathematics, and engineering. At Caltech, we investigate the most challenging, fundamental problems in science and technology, while educating outstanding students to become creative members of society. Since 1923, Caltech faculty and alumni have been awarded 32 Nobel Prizes.

FAST FACTS

Founded: 1891
 Location: Pasadena, CA
 Mascot: the beaver, nature's engineer
 Student newspaper: *The California Tech*
 Most popular course: Cooking Basics

HONOR CODE

"No member of the Caltech community shall take unfair advantage of any other member of the Caltech community."

The code confers the power to freely choose responsible actions, a freedom the Caltech community highly values and guards. Collaboration on homework and other assignments, as well as nonproctored and take-home exams, are two examples of the Honor Code in action.

STUDENT ENROLLMENT

(2011-2012)
 597 men (61%)
 381 women (39%)
 978 total undergraduates

CLASS SIZE

Classes with fewer than 20 students: 63%

Classes with fewer than 10 students: 35%

Classes with over 100 students: 3%

FACULTY

3:1 student-to-faculty ratio (lowest of any research university in the country)

322 full-time faculty members
 31 Nobel Prize winners (32 prizes), 5 in residence

56 National Medal of Science recipients
 15 California Scientists of the Year

NOBEL LAUREATES IN RESIDENCE

David Baltimore (1975, Physiology or Medicine)
 Rudy Marcus (1992, Chemistry)
 Ahmed Zewail (1999, Chemistry)
 David Politzer (2004, Physics)
 Robert Grubbs (2005, Chemistry)

MOTTO: "THE TRUTH SHALL MAKE YOU FREE."

admissions.caltech.edu



ADMISSIONS AND FINANCIAL AID

CLASS OF 2016 "RAW DATA"

Most recent data, August 2012

Applicants: 5537
 Admit Rate: 12%
 Freshman class: 265
 Women: 37%
 Men: 63%
 Students of underrepresented* ancestry: 16%

* Students in this category self-reported race/ethnic identity of "American Indian or Alaskan Native," "Black or African-American," or "Hispanic/Latino."

GEOGRAPHIC DATA

West: 41%
 Southwest: 8%
 Midwest: 13%
 New England: 5%
 Mid-Atlantic: 14%
 South: 12%
 International: 7%

ACADEMIC ACHIEVEMENT

Exam	Middle 50%
SAT	2230-2350
SAT CR	720-780
SAT Math	770-800
SAT Writing	730-798
SAT Math Level 2	800-800 (mid-50%)
ACT Composite	34-35
ACT Math	35-36
ACT English	34-35

- Percent in top tenth of graduating class: 98%
- Percent in top quarter of graduating class: 100%

FRESHMAN APPLICANTS

Secondary School Academic Preparation

- 4 years of Math (including calculus)
- 1 year of Physics
- 1 year of Chemistry
- 3 years of English (4 years recommended)
- 1 year of U. S. History/Government (waived for International students)

Testing Requirements

- TOEFL (international students only)
- SAT or ACT
- SAT Math Level 2
- 1 SAT Science Subject test: Biology (Ecological or Molecular), Chemistry or Physics
- Caltech strongly recommends that students submit all standardized test results.

Recommendation Letters

- 1 Math or Science Evaluation and
- 1 Humanities or Social Science Evaluation

TRANSFER APPLICANTS

College Academic Preparation

- Exposure to college-level calculus and calculus-based physics.
- The courses for which enrolling transfer students will receive credit will be determined at the time of enrollment.
- A detailed list of Caltech first-year and second-year courses is available online at registrar.caltech.edu.

Testing Requirements

- TOEFL (international students only)
- Transfer Entrance Examination in Mathematics and Physics

Recommendation Letters

- 2 Math, Science and/or Engineering Faculty Members

AFFORDING CALTECH

Our need-based financial aid program has been highlighted by several publications including: *Kiplinger's Personal Finance*, *The Princeton Review*, and *U.S. News and World Report*.

- On average, between 54%-58% of undergraduates receive need-based aid.
- Average undergraduate need-based financial aid package for 2011-2012: \$36,483.
- Average indebtedness for Class of 2011: \$13,442 for a total of four years. This total is among the lowest for a four-year education at any college or university.

TUITION AND FEES

2012-2013 Undergraduate Student Budget for Freshmen:

- Tuition \$38,085
- Student Fees \$1,503
- Room: \$6,798
- Board (5 days/week): \$5,286
- Additional Meal Allowance (est.): \$1,413
- Books and Supplies (est.): \$1,323
- Personal Expenses (est.): \$1,974

Total: \$56,382

All entering students are charged a one-time \$500 Orientation Fee in addition to the mandatory fees applicable to all undergraduate students.

APPLICATION DEADLINES	EARLY ACTION	REGULAR DECISION
Freshman application and supporting material	November 1	January 3
Freshman reply date	May 1	May 1
Transfer application and supporting material	-	February 15
Transfer reply date	-	June 1
3/2 application and supporting material	-	April 1
3/2 reply date	-	June 1

finaid.caltech.edu



SURF

The Summer Undergraduate Research Fellowships (SURF) program gives undergraduate students access to many of the finest research facilities in the world and an opportunity to receive personal mentoring from global leaders in their respective fields. SURF is based on the same grant model of research funding that applies to even the most senior faculty so that students gain experience in seeing a project through from proposal writing to presentation of results.

- Amount of fellowship: \$6,000
- Number of research weeks: 10
- Percentage of freshmen who participated in SURF for 2012: 55%
- Number of SURFs awarded to Caltech students in 2012: 346
- Percentage of Caltech students who participate in SURF: 84%

ACADEMICS

ACADEMIC DIVISIONS

Students declare an academic option (major) at the end of their freshman year. Listed below are the academic divisions and majors offered in each division. Specialized concentrations within each option are in parentheses.

- **Biology:** Biology
- **Chemistry and Chemical Engineering:** Chemical Engineering, Chemistry (Biochemistry, Chemical Physics, Inorganic Chemistry, Organic Chemistry)
- **Engineering and Applied Science:** Applied and Computational Mathematics, Applied Physics, Bioengineering, Computer Science, Electrical Engineering (Communications and Signal Processing, Control, Electronic Circuits, Microwave and Radio Engineering, Optoelectronics, Solid-State Electronics), Engineering and Applied Science (Computation and Neural Systems, Environmental Science, Materials Science), Mechanical Engineering
- **Geological and Planetary Sciences:** Geobiology, Geochemistry, Geology, Geophysics, Planetary Sciences

- **Humanities and Social Sciences:** Business Economics and Management, Economics, English, History, History and Philosophy of Science, Philosophy, Political Science
- **Physics, Mathematics and Astronomy:** Astrophysics, Mathematics, Physics
- **Independent Studies Program**
- **Minors:** Aerospace, Control and Dynamical Systems, English, Geological and Planetary Science, History, History and Philosophy of Science, Philosophy, Structural Mechanics

POPULAR INSTRUCTIONAL DISCIPLINES

Academic Discipline	% of Degrees Awarded
Engineering	41%
Physical Science	25%
Mathematics	11%
Biological and Life Sciences	8%
Computer Science	11%

CORE CURRICULUM

Caltech's core curriculum prepares students for the interdisciplinary nature of contemporary research in science and technology, and positions Caltech graduates for leadership roles in academia and industry. Significant study in the humanities and social sciences is an important component of the core, giving our alumni the ability to navigate the societal, political, and economic factors that influence (and are influenced by) their work. The Core Curriculum includes:

- 3 terms of mathematics
- 3 terms of physics
- 2 terms of chemistry
- 1 term of biology
- 1 freshman "menu" course (*astronomy, geology, environmental engineering and science, or energy science*)
- 2 terms of introductory lab courses
- 1 term of science communication
- 12 terms of humanities and social sciences
- 3 terms of physical education

Seminar (frontier) courses, also known as pizza courses, are offered in a range of fields, and can intrigue students' minds while filling their stomachs. A rotation of faculty talk about the exciting nuances of their research once a week, providing students the opportunity to hear about a variety of focused interests within broad fields like Engineering, Chemistry, Geology and Planetary Science, Computer Science and many more.

RESEARCH

ON CAMPUS RESEARCH FACILITIES

A sampling of our facilities:

- **Beckman Institute**
A bold home for multi-disciplinary chemical and biological research, BI is an environment explicitly designed to encourage the initiation of research "too innovative" or "too high-risk" for regular sources of scientific exploration like government or industry. www.its.caltech.edu/~bi
- **Cahill Rooftop Observatory**
The CRO has 8, 10, and 14 inch telescopes atop a building dedicated to Astronomy and Astrophysics (a building that even features its own telescoping staircase), and mobile equipment which can be loaned out for observing trips. www.astro.caltech.edu/cro
- **Caltech Center for Sustainable Energy Research**
CCSER focuses on the direct generation of electricity from sunlight, the conversion of sunlight into chemical fuels, and energy storage through the use of fuel cells. CCSER's goal is to convert the industrial world powered by fossil fuels into one that is powered by sunlight. www.ccsr.caltech.edu
- **Kavli Nanoscience Institute**
By focusing on the development of nanobiotechnology and nanophotonics, the KNI seeks to move beyond creating individual structures to create interacting systems, in the interest and growth of engineering and life sciences. www.kni.caltech.edu
- **Keck Institute for Space Studies**
Primarily developing new planetary, Earth and astrophysics space mission concepts and technology, KISS provides an innovative link between Caltech and the Jet Propulsion Lab as a self-proclaimed "think-and-do tank". www.kiss.caltech.edu
- **Linde + Robinson Laboratory**
The first renovated laboratory to receive LEED Platinum certification, Linde + Robinson houses state-of-the-art laboratories for oceanography, atmospheric chemistry, biogeochemistry, environmental microbiology and environmental chemistry and technology. www.lindecntr.caltech.edu
- **Seismological Laboratory**
Since its establishment in 1921, the Seismo Lab has seen the development of the Richter and Moment Magnitude scales for measuring seismic activity and also directs controlled 'quakes' on our own Millikan Library. www.seismolab.caltech.edu

OFF-CAMPUS RESEARCH FACILITIES (miles from campus)

- JPL 4.4 miles
- Kerckhoff Marine Bio Lab 39.9 miles
- Big Bear Solar Observatory 69.8 miles
- Palomar Observatory 92.1 miles
- Combined Array for Millimeter-wave Astronomy (OVRO) 214.2 miles

SPECIAL PROGRAMS

- LIGO Hanford (Richland, WA) 846.8 miles
- LIGO Livingston (Livingston, LA) 1612.3 miles
- Submillimeter Observatory 2,471.6 miles
- Thirty Meter Telescope (to be constructed and operational on Mauna Kea, Hawaii, by 2018) 2488.3 miles
- Keck Observatory 2,491.8 miles
- Chajnantor Observatory (San Pedro de Atacama, Chile) 5132.4 miles

CALTECH-UC SAN DIEGO MEDICAL SCHOLARS PROGRAM

This eight-year medical school program enrolling six students per year comprises four years (BS) at Caltech and four years (MD) at UC San Diego. *Students are only eligible by applying Early Action.*

STUDY ABROAD PROGRAMS

- Cambridge Scholars Program
- London Scholars Program
- Copenhagen Scholars Program
- Edinburgh Scholars Program
- École Polytechnique Scholars Program
- Melbourne Scholars Program

CROSS-REGISTRATION OPPORTUNITIES

- Occidental College
- Art Center College of Design

ROTC (with the University of Southern California)

- Air Force
- Army



LIVING AT CALTECH

LOCATION: SOUTHERN CALIFORNIA

PASADENA, CA

Caltech is located in Pasadena, CA, just 10 miles northeast of Los Angeles. With an average temperature of 77 degrees Fahrenheit, Pasadena is the home of the world-famous Tournament of Roses Parade, plus cultural landmarks like the Norton Simon Museum, Huntington Library and Gardens, Pasadena Playhouse and Rose Bowl. Colorado Boulevard is a 5 minute walk from campus, and Old Town Pasadena features great restaurants and shopping and an annual film festival and free summer concerts. Pasadena City Hall has been featured in television shows like Parks and Recreation and The Big Bang Theory! Public transportation options include the ARTS Bus Route and Gold Line Light Rail, which connects to Union Station in Downtown Los Angeles.

LOS ANGELES, CA

The "City of Angels" was founded in 1781 and is home of the iconic Hollywood Sign, Olvera Street and Griffith Observatory. Los Angeles features more than 80 stage theaters and 300 museums, more than any other U.S. city. Recent additions include L.A. Live, the Walt Disney Concert Hall and the Kodak Theatre, home of the Academy Awards.

HOUSING

The Housing Office provides students with convenient, attractive housing both on- and off-campus. First-year students are required to live on campus and 92% of students live in Caltech Housing. Our eight houses include: Avery, Blacker, Dabney, Fleming, Lloyd, Page, Ricketts and Ruddock.

First-year students select their top-choice houses during Rotation, which takes place the week before classes begin. Each House has its own set of traditions and characteristics, like 'Hogwarts for scientists'!

The Master of the Student Houses (MOSH) is a professorial faculty member who acts as liaison between Caltech undergraduates and faculty to promote the well-being of Caltech's students, both socially and academically. The MOSH regularly hosts events for faculty and undergraduates throughout the year, including barbecues, etiquette dinners, movie nights, and trips to the opera, theater and symphony.

ATHLETICS

Caltech competes in the Southern California Intercollegiate Athletic Conference (SCIAC) with the goal of developing the physical, social and emotional skills of Caltech students necessary for the cultivation of a sound mind in a sound body. 80% of Caltech's students participate in the intercollegiate, club, intramural and informal recreation activities sponsored by the athletics department.

CALTECH'S 17 DIVISION III VARSITY TEAMS

Baseball, Basketball (M & W), Cross Country (M & W), Fencing (M & W), Soccer (M), Swimming & Diving (M & W), Tennis (M & W), Track & Field (M & W), Volleyball (W), and Water Polo (M & W)

More information on the teams, coaches, and facilities, as well as physical education and recreation at Caltech can be found online at gocaltech.com.

CLUB SPORTS

Aikido, Alpine, Badminton, Ballet, Ballroom Dancing, Capoeira, Dance Troup, Floorball, Fencing, Orienteering, Racquetball, Running (a.k.a. Road Runners), Shorinji Kenpo, Shotokan Karate, Women's Softball, Men's Soccer, Women's Soccer, Surf & Windsurf, Triathlon, Men's Ultimate Frisbee, Women's Ultimate Frisbee, Co-ed Volleyball, and Co-ed Water Polo

PERFORMING AND VISUAL ARTS

The Performing and Visual Arts faculty are committed to quality in performance and education, and share a dedication to serve the student who wishes to enrich and broaden his or her college experience. The Music House provides students with rehearsal rooms, some with variable acoustics. Students can receive academic credit for their participation in activities, including:

- Caltech/Occidental College Orchestra, a full 70-piece orchestra that gives three pairs of concerts annually, both on the Caltech and Occidental campuses.
- Caltech's two Jazz Bands often invite local professionals, including members of Big Bad Voodoo Daddy and the Brian Setzer Orchestra, to perform as guest artists and clinicians.
- Caltech's Chamber Music Ensembles include nearly thirty trios, quartets and quintets that perform music ranging from the Renaissance to the Baroque period.

- The Men's and Women's Glee Clubs perform two full concerts a year and participate in off campus choral festivals and events.
- Chamber Singers are auditioned singers who perform an advanced repertoire, both a capella and accompanied.
- Theater Arts at Caltech (TACIT) produces 2-3 shows per year, including The Three Musketeers, Rossum's Universal Robots and Rocket Girl. Rehearsals, workshops and other events are held in Caltech's Theater Arts House.
- Ceramics, Painting and Drawing and Silkscreening classes are offered each term. The silkscreen room is open 24 hours per day, and is used extensively during Caltech's annual Ditch Day!
- Beginning, Intermediate and Advanced Guitar instruction are offered each term, exploring works from the Renaissance through contemporary periods.

CLUBS AND ORGANIZATIONS

A sample of our 160 clubs and organizations:

- American Society of Mechanical Engineers
- American Institute of Chemical Engineers
- Anime Society
- Asian Pacific Student Union
- Black Graduate Student Association
- Board Game Club
- Caltech Christian Fellowship
- Caltech Jam Room
- Caltech Karate Club
- Caltech Muslim Students Association
- Caltech Robotics Club
- Caltech Y
- Chess Club
- CLASES
- Dance Team DDR Club
- Entrepreneur Club
- Hillel
- Latino Association for Students in Engineering and Science
- Longboard Club
- Meat Club
- One Act Theater
- Prank Club
- Premed Club
- Quiz Bowl
- Rubik's Cube Club
- Science Olympiad
- Society of Hispanic Professional Engineers
- Society of Women Engineers
- SPECTRE
- Table Tennis
- Vegetarian Club
- Women in Engineering, Science, and Technology

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