STEM Summer Enrichment Programs, Internships

Southern CA

CalTech Summer STEM Programs http://outreach.caltech.edu/summer

<u>Cabrillo Marine Aquarium Young Scientists Program</u> Free, intensive research program that guides students through independent investigations on Southern California marine life. Students work with a team of CMA staff mentors for the aim of conserving and protecting organisms in our collection or along our shoreline. https://www.cabrillomarineaquarium.org/research/young-scientists-program.asp

<u>Charles R. Drew University of Medicine and Science</u> (Los Angeles) The STEP-UP Program provides a hands-on summer research experience for high school and undergraduate students interested in exploring research careers in the biomedical, behavior https://www.cdrewu.edu/research-training-opportunities/high-school-research-opportunities

<u>CNSI NanoScience Lab at UCLA</u>: Summer Workshop for high school students interested in advanced science and technology. https://www.summer.ucla.edu/institutes/NanoScienceLab

<u>Guided Discoveries Summer Camps</u> - Catalina Sea Camp: one and 3-week camps are one of a kind ocean adventure and marine biology summer camps located at Toyon Bay on Catalina Island. **AstroCamp**: a unique mix of science and space exploration activities like telescope observations, beginning and advanced rocketry, planetary and solar science, coupled with mountain adventure activities in the San Jacinto Mountains https://guideddiscoveries.org/summer-camps/

<u>LA Biomedical Research Institute</u> (Torrance) HS Summer Fellow Program Eight-week program designed to encourage graduating high school seniors and high school juniors to explore careers in the field of biomedical science. \$2,200 Stipend. https://labiomed.org/hssfp

La Brea Tar Pits & Museum Field School and limited Internships. http://www.tarpits.org/research-collections/current-research

iD Tech Camps - UCLA Summer computer camps for the children ages 8-17. https://www.idtech.com/locations/california-summer-camps/ucla

<u>Southern CA Junior Academy of Science</u> Individualized research opportunities with an expert mentor during the Academic Year, in all areas of science. https://scas.nhm.org/junior-academy/

<u>UCLA Summer Engineering Research Program</u>: The UCLA Henry Samueli School of Engineering and Applied Science (HSSEAS) offers an eightweek summer program. https://www.seasoasa.ucla.edu/high-school-tech-camp/

<u>UCode</u> Powerful approach to teaching coding, and enhancing understanding of math and science. Web animation, robotics, Python, developer Bootcamp for 9-18yr olds. 4 locations https://www.ucode.com/camps/robotics-coding-2019

USC Young Researcher Program dedicated to serving the local USC neighborhood by providing high school students a unique summer research opportunity. Through research experiences YRP aims to increase interest in STEM fields among students traditionally underrepresented in STEM. https://www.youngresearchers.usc.edu/about

California - Out of Area

Academic Talent Development Program Summer robotics courses at UC Berkeley. https://atdp.berkeley.edu/

Chabot Space and Science Center, Oakland, CA Summer day camp for youth. https://chabotspace.org/education/summer-camp/

<u>COSMOS</u> (California State Summer School for Mathematics & Science) Four-week residential summer program for 8th-12th graders at UC Davis for 8-12 grade students who excel in STEM. https://cosmos-ucop.ucdavis.edu/app/main

<u>Lawrence Hall of Science Camps</u> Residential camps, backpacking trips and wildlife biology and marine biology research stations camps around California with interactive science explorations and recreation. Age 8-16. https://www.lawrencehallofscience.org/visit/camps_and_classes

<u>Lawrence/Livermore Laboratory Biotech Summer Experience</u> Two-week program engages high school students in an authentic research project in molecular biology and bioinformatics. https://st.llnl.gov/sci-ed/biotech-summer-experience

<u>Pt. Reyes Science Camp</u> Environmental education, hiking, beach exploring, crafts, science projects & 1 night backpack trip at Pt Reyes National Seashore in Marin. http://www.ptreyes.org/summer-camp

Sally Ride Science Camps (Berkeley, CA) Sally Ride Science Camps encourage girls' interests in science by giving them hands-on science learning and activities in an environment that is designed to be supportive, enriching. http://www.sallyridecamps.com/index.html

<u>SMASH Academy</u> Three-year STEM- intensive residential college prep program that empowers students to deepen their talents and pursue STEM careers. Every summer, scholars are immersed in tuition-free studies at leading universities throughout the country. During the academic year, scholars participate in monthly programming. Committed to eliminating the barriers faced by young underrepresented people of color in STEM and fostering their untapped talent for the advancement of our nation. UCLA, Stanford, UC Davis https://www.smash.org/programs/smash-academy/

Stanford Medical Youth Science Program Stanford University School of Medicine Five-week residential program for students (completing 10th – 11th grades) from a low-income background who are interested in science, medicine, and health and have demonstrated intelligence, maturity, and initiative. No cost to participants. http://smysp.stanford.edu/

Stanford University Mathematics Camp (SUMaC) The SUMaC program brings mathematically talented and motivated high-school students from across the United States, and from around the world, to Stanford University for four weeks of serious mathematical pursuits. The goals of the program are to provide access for these students to advanced topics in mathematics, to lead these students through topics that are of great significance to mathematics and the sciences, and to provide a friendly social environment for interaction between SUMaC participants and Stanford Mathematics Department faculty and students. http://sumac.stanford.edu/

Summer Engineering Seminar (SES) - Santa Clara University School of Engineering Five-day program for students completing 10th & 11th grades. The Summer Engineering program has two sessions and designed to acquaint participants with the engineering profession, motivating them to enter science and engineering majors. Competitive application process. Girls and under-represented minorities are encouraged to apply. All on-site fees are paid by grants. https://www.scu.edu/engineering/beyond-the-classroom/outreach/summer-engineering-seminar-ses/

<u>The Tech Museum of Innovation</u>, San Jose, CA. Summer Day camp for ages 9-14. https://www.thetech.org/education/summer-camps

<u>UC Davis Young Scholars Program</u> Unique six-week college credit program for 40 high achieving students completing 10th – 11th grades. An interdisciplinary summer research program in biological, environmental and agricultural sciences. http://ysp.ucdavis.edu/summer-residential-research-program-high-school-students

Nation-wide

<u>Generation Google Scholarship</u> Awarded to current HS seniors intending to study computer science at a university in the US or Canada. https://buildyourfuture.withgoogle.com/scholarships/generation-google-scholarship/ - !?detail-content-tabby_activeEl=overview

MITES Program at MIT (Minority Introduction to Engineering and Science) MITES is a challenging 6-week summer program that prepares promising rising seniors for careers in engineering and science. If you are selected, all educational, housing, meals and activity costs are covered. You must, however, pay for your own transportation to and from MIT. http://oeop.mit.edu/programs/mites

<u>NASA National Space Club Scholars Program</u> This is a 6-week <u>summer internship</u> at NASA's Goddard Space Flight Center. It is open to students who will be 16 years old and have completed the 10th grade, have demonstrated high academic success, and have an interest in space science or engineering as a career. https://intern.nasa.gov/

<u>National Institutes of Health</u> Spend a summer working at the NIH side-by-side with some of the leading scientists in the world, in an environment devoted exclusively to biomedical research. https://www.training.nih.gov/programs/hs-sip

<u>Programs in Mathematics for Young Scientists</u> (**PROMYS**) Six-week program for students completing 9th – 11th grades, at Boston University, designed to encourage motivated high school students to explore the creative world of mathematics in a supportive community of peers, counselors, research mathematicians, and visiting scientists. Reasonably priced. https://promys.org/

<u>Talent Development and Innovation and Sciences (TDIS) Summer Internship.</u> Rich summer experiences that are designed to develop them professionally and instill in them an appreciation for innovation in STEM-related programs http://www.qem.org/qem-internships

Science & Engineering Apprenticeship program (George Washington Univ.) This program places academically talented high school Students (at least 16 yrs old, sophomores/juniors) with interest in science & math in Department of Defense laboratories for an 8-week period over the summer. The program provides experience in the world of scientific research, with hands-on exposure to scientific & engineering practices not available in the HS environment. It is a <u>paid apprenticeship</u> and the students are assigned a scientist or engineer as their mentor. https://www.usaeop.com/program/seap/

<u>Smithsonian Youth Programs</u> Fun and challenging (and sometimes mind-blowing!) experiences for K-12 kids interested in science, nature https://www.si.edu/youth-programs

<u>SSP Summer Science Program</u> 39-day residential enrichment program designed to challenge and inspire talented and motivated high school students from around the world. Astrophysics or Biochemistry. 4 states. https://summerscience.org/the-ssp-experience/what-is-ssp/

<u>US Space Summer Camp</u> U.S. Space Camp is a five-day program jam-packed with astronaut training for young people. Activities include simulated Space Shuttle missions, IMAX movies, training simulators (like the 1/6th Gravity Chair), rocket building and launches, scientific experiments, and lectures on the past, presents, and future of space exploration. Location: Alabama. https://spacecamp.com/

<u>Univ. of Florida Student Science Training Program</u> SSTP is a seven-week residential program for rising 10-11th grade students who are interested in careers in science, math, computers, and engineering. https://www.cpet.ufl.edu/students/summer-programs/sstp/

International

<u>Earthwatch Teen Expeditions</u> – Hands-on, engaging, and meaningful, provide unrivaled opportunities for 15-18 yr. olds to undertake vital, peer-reviewed scientific field research under the supervision of skilled research teams in a professional setting on projects all around the world. https://earthwatch.org/Education/Teen-Expeditions

<u>School for Field Studies</u> Experienced research scientists will push you to get creative as you work to understand the critical environmental issues of our time. You will be out there doing science, not just talking about it in the classroom. https://fieldstudies.org/

<u>Shad Program</u> The Shad Valley program in Canada is an exciting summer learning and employment opportunity designed for top students in senior high school. https://www.shad.ca/

<u>Costa Rican Field Ecology Adventures</u>. Broadreach combines MS/HS student's thirst for fun and adventure with tangible skill development, real-world educational opportunities and a genuine commitment to service. https://www.gobroadreach.com/programs/field-biology-high-school-summer-camp-in-costa-rica/