
# COSMOS California State Summer School for Math and Science

## 2014 PROGRAM AND APPLICATION PROCESS

COSMOS is an intense, experiential four week summer learning program for talented high school students interested in science and mathematics. Working side-by-side with distinguished university researchers and faculty members, students will take part in laboratory and field work that encompasses current research underway at the University of California.

### Academics

**Rigorous, collaborative, hands-on**

The COSMOS program comprises a variety of academic "clusters", each of which includes two science and/or math courses and a science communications course. Students will experience labs, lectures, field activities and discussions and will work on a related research project.

### Accommodations

**Summer friendships, lasting bonds**

In providing students the opportunity to live in a dormitory setting with their peers, COSMOS offers another valuable facet of college preparation. Students form lasting bonds with others who share their interest in and aptitude for science and math. Weekends bring a variety of fun field trips.

### Financial Assistance

**Need-based aid**

Those who qualify individually for free or reduced lunch by the National School Lunch Program may also qualify to receive financial aid, based on verification of their eligibility and the availability of funding. Students who do not receive free or reduced lunch will be assessed for financial aid based on family size and income.

**Apply online:**
ucop.edu/cosmos

**Application period:**
January 21–February 21

**Tuition/fees:**
$30 application fee
(non-refundable)

$3,100 tuition fee*
(includes room and board)

*$6,000 tuition fee for non-California students not eligible for aid

*For further information regarding COSMOS, please visit:* **ucop.edu/cosmos**

COSMOS
California State Summer School for Mathematics and Science

# COSMOS courses allow students to explore advanced topics in science, technology, engineering and mathematics (STEM) fields.

**Virtual Information Sessions:**
January 16 3–4pm
January 23 6:30–8pm
January 30 6:30–7:30pm
February 5 4–5:30pm
www.ucop.edu/cosmos

## Application

### Limited space, competitive admission

Admission to COSMOS is competitive. To qualify for COSMOS, students must have excelled academically.

As the demand for high-quality STEM opportunities for California pre-college students has increased in recent years, the number of COSMOS applicants has grown, too. Due in part to campus housing limitations, the program can only accommodate about 700 students each year.

### Admission criteria include:

- High academic performance (grades) in STEM courses
- Recommendations from STEM teachers
- Thoughtful responses to short-answer questions

Priority is given to 9-11th grade students. Previous COSMOS attendees are not eligible for admission.

| 2014 | UC Davis<br>July 6–August 2 | UC Irvine<br>June 29–July 25 | UC Santa Cruz<br>July 6–August 2 | UC San Diego<br>July 6–August 2 |
|---|---|---|---|---|
| BIOLOGICAL SCIENCES | Biomedical Sciences | Genes, Genomes, Biocontrol A²BO<br>Tissue and Tumor Biology and Modeling BA²C<br>Biomedical Sciences--Clinical Translation Science B | Marine Mammal Biology and Oceanography B<br>Astronomy A | |
| PHYSICAL SCIENCES | Physics in Electro-optics and Nuclear Technology A²P<br>Introduction to Astrophysics A²<br>The Chemistry of Life A²O | Biodiversity and Ecosystems of Coastal California<br>Astronomy and Astrophysics AG<br>Big Bang and the Subatomic World AG | Nanochemistry BC<br>Chemistry and Environmental Toxicology CO<br>Chemistry and Mathematics ACO | Living Oceans and Global Climate Change CO<br>Biodiesel from Renewable Sources C |
| MATHEMATICS | Mathematics A²<br>Mathematical Modeling of Biological Systems A²T | | Number Theory and Logic/Puzzles A | |
| ENGINEERING | Intro to Engineering Mechanics TP<br>Computers in Biophysics and Robotics<br>Biotechnology B | Mobility Engineering for Land, Air and Space A²GP | Computer Engineering: Internet Evolutions A | Engineering Design and Control of Kinetic Sculptures A<br>Earthquake Engineering A²<br>From Lasers to LCDs: Light at Work P<br>Bio/Mechanical Engineering: The Amazing Red Blood Cell B<br>Tissue Engineering and Regenerative Medicine A²B |
| COMPUTER SCIENCE | | Mobile Digital Media AO | Video Game Design A² | Computers in Everyday Life A²O<br>Music and Technology O |

*Prerequisites:* A Algebra A² Algebra II G Geometry T Trigonometry B Biology C Chemistry P Physics O Other

*For campus-specific information, please visit:*

UC Davis cosmos.ucdavis.edu
UC Irvine cosmos.uci.edu
UC San Diego cosmos.ucsd.edu
UC Santa Cruz cosmos.ucsc.edu

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