

Stanford | Pre-Collegiate Studies



Program Guide



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Financial Aid *Scholarships Available*

Stanford Pre-Collegiate Studies is pleased to offer limited financial aid to high-achieving, low-income students. Aid is available to both U.S. and international students.

Photo: Karl Nielsen



Welcome to Stanford Pre-Collegiate Studies!

With participation from every state and over 80 countries, our offerings attract bright, intellectually adventurous, and passionate students who are eager to come together to explore advanced topics, build lasting friendships, and gain new insights into themselves.

Through Stanford Pre-Collegiate Studies, students can attend the nationally recognized Stanford Online High School or engage in more than a dozen Stanford Pre-Collegiate Studies programs over the summer and throughout the academic year. Stanford also provides the opportunity for qualified high school students to enroll in college-credit courses through Stanford Summer Session.

Our instructional teams are experts in their fields and eager to share their enthusiasm for their subjects and their love of teaching. Building on themes of collaboration, critical thinking, and engaging classrooms, we create a magic formula of curriculum, students, and instructors, producing vibrant and intellectually stimulating learning environments.

Rick Sommer, Ph.D.

Executive Director, Stanford Pre-Collegiate Studies



Find yourself at Stanford.

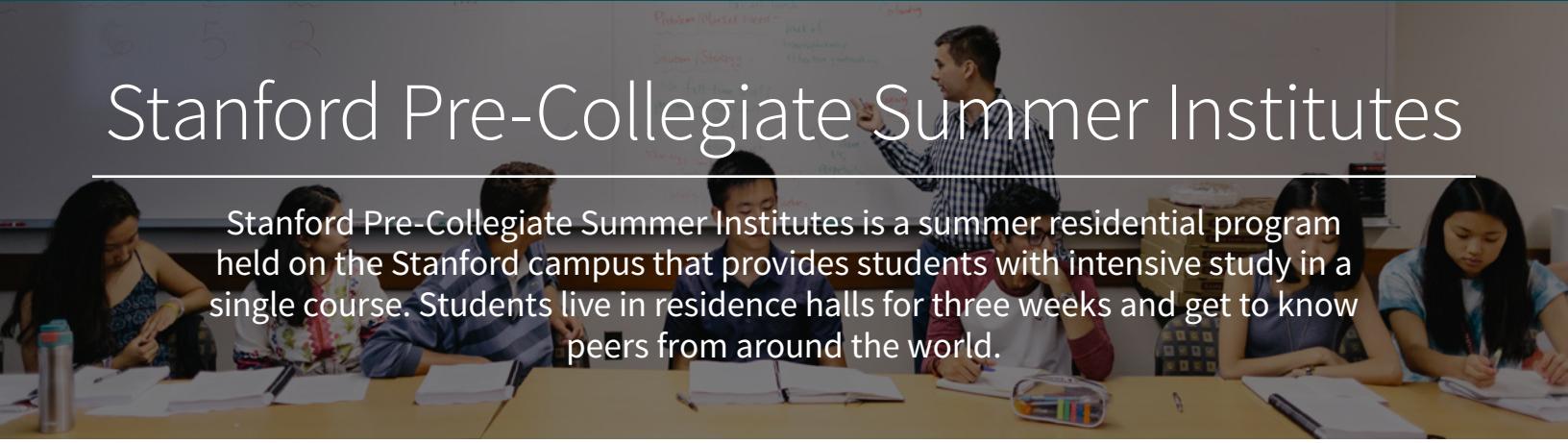






Explore Your Passions.

Stanford Pre-Collegiate Summer Institutes



Stanford Pre-Collegiate Summer Institutes is a summer residential program held on the Stanford campus that provides students with intensive study in a single course. Students live in residence halls for three weeks and get to know peers from around the world.

Over the years, we have welcomed students from

 **50**
States

 **80**
Countries

Immerse Yourself

Stanford Pre-Collegiate Summer Institutes provides a taste of the Stanford classroom experience and challenges students with advanced content that is not typically found in the high-school curriculum.

Our courses develop critical-thinking and problem-solving skills, expose students to current research directions, and offer a challenging and rewarding academic experience in an environment with others who share a passion for learning.



Grades **8-11**



50+

Courses Offered
Each Summer



100%

Of Students Live
on Campus





Hands-On Experience

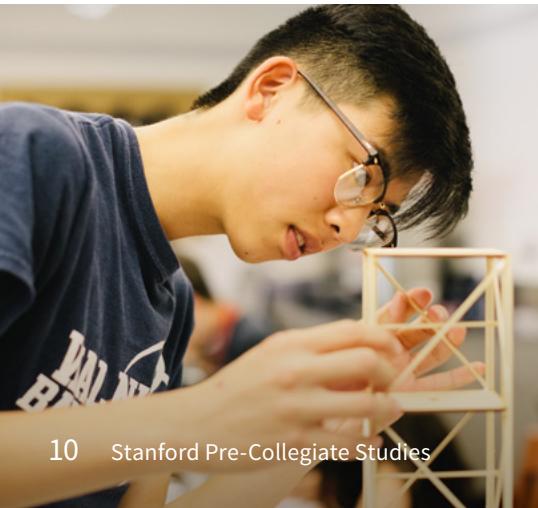
"The other students were just as driven and motivated as I am. The teacher was really knowledgeable and passionate about the subject. He focused on a lot of hands-on experience and real-life application."

Our Courses

Not for credit or grade, our courses provide in-depth and interactive exploration of advanced topics. Our instructors design custom courses that provide a deep dive into their areas of expertise and highlight new areas of research. Our courses feature content more typically found in a college curriculum. Instructors are assisted by undergraduate and graduate student mentors who serve a dual role of Residential Counselor and Teaching Assistant.

Course Highlights

- Artificial Intelligence
- Astrochemistry
- Bioscience & Biotechnology
- Business & Entrepreneurship
- Computer Simulations & Interactive Media
- Cosmology
- Creative & Expository Writing
- Cryptography
- Engineering
- International Relations
- Legal Studies
- Quantum Mechanics
- Sociology
- Theory of Relativity



Student Life & Community

The Stanford Pre-Collegiate Summer Institutes integrates academics and social activities into every aspect of the program. Students live in residence with classmates attending the same course and interact daily with other students who share their interests and academic passions.

The program includes outdoor recreational activities that offer students the opportunity to exercise, socialize, make friends, and have fun. Activities are designed for a variety of interests. Weekend excursions take students to points of cultural, historical, or recreational interest in the San Francisco Bay area.

"I had an overall amazing experience. I really loved how inviting and inclusive all of the people here were and I'll never forget my experience. I was pushed out of my comfort zone in all the best ways. I honestly think this program will have a life-long impact on my confidence, my perspective, and my life in general."

—Pre-Collegiate Summer Institutes Student, 2016



Global Focus Real Connections

Bright peers and engaged mentors from around the world, expert instructional and residential staff, and the beautiful Stanford University campus create a truly special and unforgettable experience.



Stanford Summer Humanities Institute

In this three-week residential program, rising high school juniors and seniors explore the big questions at the heart of the humanities in seminars led by distinguished Stanford professors.



Like-Minded But Diverse Students

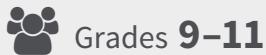
"Not only was I able to take an engaging course taught by a college professor and spend time on Stanford's beautiful campus, but I was able to meet the most incredible people."

Students spend the first two weeks intensively studying and researching a topic in history, literature, or philosophy; attending daily lectures by the faculty members; and participating in group discussions and activities in the afternoon. During their third week, students work closely with professors, graduate teaching associates, and writing mentors to produce original research projects.



Stanford Summer Arts Institute

Students come together for a three-week intensive arts residential program offering academically challenging, interdisciplinary courses in architecture, visual design, and music.



Grades **9-11**

Immerse yourself in interdisciplinary study at the intersection of art and academia in the heart of Silicon Valley. The Stanford Summer Arts Institute offers four courses that emphasize the essential connections between the arts and other areas of study, such as neuroscience, history, engineering, and product design.



Experience Arts at Stanford

The Arts are alive at Stanford! The Bing Concert Hall, Cantor Arts Center, Anderson Collection, and McMurtry building form the newly expanded arts district at Stanford.

Stanford University Mathematics Camp

Stanford University Mathematics Camp (SUMaC) welcomes an elite group of talented rising high school juniors and seniors from around the world for intensive study in advanced mathematics.



Grades **10–11**



Meet Professor Olga Russakovsky

"SUMaC jump-started my career. I majored in Math at Stanford, got a Ph.D. in Computer Science and became a professor in AI. I even started my own pre-collegiate program (SAILORS)."

The Stanford University Mathematics Camp (SUMaC) leads students on a journey in advanced mathematics through lectures, guided research, and group problem solving. In a social environment centered on mathematics, students explore current lines of mathematical research, the historical development of important areas of mathematics, and applications across scientific disciplines.



Stanford Medical Youth Science Program

Stanford Medical Youth Science Program (SMYSP) offers a five-week biomedical enrichment program for academically talented, low-income, and underrepresented minority students.



Grades **10-11**

High school sophomores and juniors from select Northern and Central California counties are invited to apply. The twenty-four students admitted annually work closely with Stanford faculty, researchers, students, and health care professionals. Students intern at Stanford Hospital, take an anatomy course at Stanford School of Medicine, and work in teams on a health-research project.

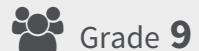
A circular inset photograph showing two young men in blue medical scrubs looking down at a book or document they are holding together. The background is a light-colored wall.

**Community
Engaged Learning**

"Not only has SMYSP given me a better idea of what I wish to pursue in the future, it has also offered a welcoming and safe environment for all the participants."

Stanford Artificial Intelligence Laboratory Outreach Summer Program

The Stanford Artificial Intelligence Laboratory partners with Stanford Pre-Collegiate Studies, to offer a three-week summer residential program aimed at increasing the number of women in science.



Who Will Change Artificial Intelligence?

This year, students watched a live Hexacopter demo, took a trip to Google, interacted with haptic touch robots, met the Stanford self-driving car, and interacted with professionals from a wide range of AI companies.

The Stanford Artificial Intelligence Laboratory's Outreach Summer Program (SAILORS) exposes students to the field of Artificial Intelligence. Students learn about cutting-edge research, work as teams to develop novel applications, and explore the social impact of AI. Preference is given to underrepresented populations in computer science.



Stanford Sports Business Academy

A summer two-week residential program that explores the exciting intersection of sports and business. The Stanford Sports Business Academy provides a glimpse into professional sports in the Bay Area.



Grades **10-11**

The Stanford Sports Business Academy gives students an overview of careers in the sports and entertainment industries, with a focus on management, law, negotiation, marketing, and leadership. Students receive instruction from Stanford Graduate School of Business faculty and staff, Stanford Athletics staff, and Bay Area professionals from sports and entertainment industries.



Building Confidence Expanding Horizons

"I met great people and had the opportunity to learn from them. You see people going off and doing incredible things. It's cool thinking, that can be me one day."



You are



here.





Enrichment Circles.

Stanford Math Circle

Stanford Math Circle teaches elementary, middle, and high school students to learn how to think like a mathematician through working on problems involving complex and advanced mathematical topics. Math Circles are guided by mathematicians, educators, and scholars from the Stanford community.



Stanford Science Circle

Stanford Science Circle offers middle and high school students the opportunity to explore the vast and exciting world of science. The classes promote science interest through engaging lectures and hands-on activities. Students learn directly from faculty, researchers, and graduate students from the Stanford community. Each quarter focuses on a different area of science.





Grades **1-12**



Circles
Meet Weekly



Located On
Stanford Campus

Stanford Humanities Circle

Stanford Humanities Circle invites middle and high school students interested in exploring the big questions at the heart of humanistic study. These discussion-based classes allow students to engage with each other and with Stanford graduate students and faculty to hone their writing and critical thinking skills. Each quarter focuses on a theme such as creative writing, philosophy, or ethics.



About Stanford Enrichment Circles

The Circles are quarter-long, after-school programs for Bay Area elementary, middle, and high school students interested in math, science, or humanities. Circle sessions are held weekly on the Stanford campus. Self-contained classes require little to no homework, making them compatible with students' other school commitments.



Take College Classes Online.

University-Level Online Math & Physics

Stanford Pre-Collegiate University-Level Online Math & Physics courses are offered throughout the year and give students the opportunity to take a broad offering of math and physics courses not typically offered in secondary schools all while earning Stanford Continuing Studies credit.



Grades 9–12

Course Highlights

These online courses allow high school students to work through advanced material at their own pace with the support of expert instructors in live online sessions.

- Complex Analysis
- Elementary Theory of Numbers
- Intermediate Mechanics
- Light and Heat
- Linear Algebra
- Modern Algebra
- Modern Physics
- Multivariable Differential Calculus
- Multivariable Integral Calculus
- Partial Differential Equations
- Real Analysis



Conference.

Discovering Medicine @ Stanford



Discovering Medicine @ Stanford offers an interactive three-day experience for high school students entering grades 11th and 12th. Students are able to explore new and emerging topics in medicine alongside peers and experts in the field.



Three-Day Conference
on Stanford Campus



Grades **10-11**

Get a Glimpse of Medicine at Stanford

The program takes place each year, and includes interactive, small-group workshops and direct engagement with a variety of health professionals. Students have the opportunity to learn from professionals, faculty, staff, and students from Stanford Hospital, Stanford School of Medicine, and the broader Stanford community. The program fosters students' interest in science and medicine, regardless of academic and socioeconomic status.



International Collaborations.

Stanford Pre-Collegiate International Institutes



The Stanford Pre-Collegiate International Institutes offers an exciting opportunity for schools and organizations from around the world to bring academically talented high school students to Stanford University for an engaging educational and multicultural experience.



20+
Countries
Represented

 **Grades 9-11**

Bringing the World to Stanford

Motivated pre-college students who attend the Stanford Pre-Collegiate International Institutes will be challenged intellectually and will develop skills in problem solving, critical thinking, collaboration, creativity, and innovation. Students will participate in workshops on multiple topics, taught by expert instructors with a passion for teaching. The program provides an American college-life experience and builds global community through an academic, multinational, team-based Global Solutions Project and a fun-filled Multicultural Exhibition from each participating organization.

Sample Academic Offerings

- Anthropology
- Artificial Intelligence
- Bioscience Exploration
- Business & Entrepreneurship
- Creative Writing
- Cross-Cultural Communication
- Design Thinking
- Digital Anatomy Lab
- Expository Writing
- Environmental Science
- Software Engineering & Game Design
- Global Business
- International Relations
- Leadership
- Legal Studies
- Mathematical Logic & Problem Solving
- Neuroscience
- Persuasive Communication
- Presentation Skills
- Robotics
- Social Innovation

“My favorite parts of the program include the college experience, informative classes, and the opportunity to meet people from other parts of the world.

It is an experience I will never forget.”

—International Institutes Student, 2016



Honors Academies *We Come to You*

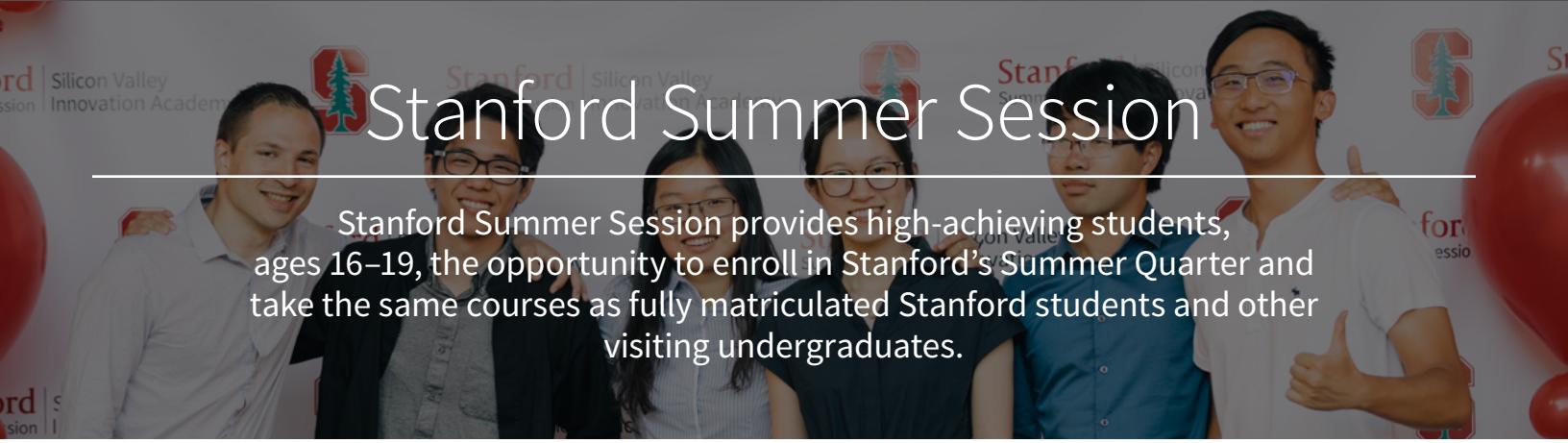
Stanford Honors Academies are two-week intensive courses on advanced topics for academically talented middle and high school students in select international locations. Courses are taught by experts in their field.





Be a Stanford Student.

Stanford Summer Session



Stanford Summer Session provides high-achieving students, ages 16–19, the opportunity to enroll in Stanford’s Summer Quarter and take the same courses as fully matriculated Stanford students and other visiting undergraduates.



16

Average
Class Size

Explore. Learn. Connect.

This eight-week program provides academic, social, and intellectual opportunities not found at high school, and allows students to gain unparalleled insights into what is required to succeed as an undergraduate. Stanford Summer Session provides a vast array of academic support including advising and tutoring. Students have ample opportunity to explore the recreational activities available on campus and in the culturally rich San Francisco Bay Area. The program creates an inclusive community of learning where students are challenged to reach their fullest potential—while at Stanford and beyond.



Ages **16-19**



Earn
College Credit



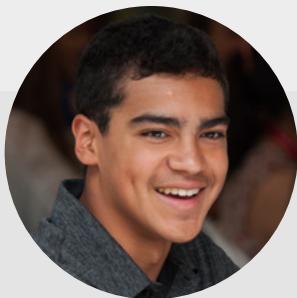
Take Up To
5 Courses





Why Stanford Summer Session?

- ✓ Earn college credit and receive an official Stanford University transcript
- ✓ Choose from 145 different courses in over 30 departments
- ✓ Dive deeply into a subject you are passionate about with a Stanford Summer Intensive Study Certificate
- ✓ Live on the Stanford campus, attend as a commuter, or take one of our specially selected courses online



Get Ready For College

Take courses designed to help you have a successful transition to college, such as “Writing Well: An Introduction to College Writing” and “Working Smarter.”

Department Highlights

- Anthropology
- Art & Art History
- Athletics, Physical Education, & Recreation
- Biology
- Center for Teaching & Learning
- Chemistry
- Civil & Environmental Engineering
- Classics
- Communication
- Comparative Literature
- Computer Science
- Computational & Mathematical Engineering
- Economics
- Electrical Engineering
- Engineering
- English
- Geological & Environmental Science
- History
- International Relations
- Languages
- Management Science & Engineering
- Mathematics
- Music
- Philosophy
- Physics
- Political Science
- Program in Writing & Rhetoric
- Psychology
- Religious Studies
- Sociology
- Statistics
- Theater & Performance Studies



Campus Life

Residential students live in undergraduate residence halls that are organized into houses, each with its own lounge and common area. Students eat meals together in a nearby dining commons, and have access to Stanford's world-renowned libraries, exercise facilities, and health services.

Carefully chosen Stanford undergraduates serve as mentors in each house and provide guidance, supervision, and plan extracurricular activities including field trips, informal discussions with Stanford faculty, outreach projects, intramural sports, residence hall activities, and more.

Students who live in the area or have an adult to stay with for the summer may attend as commuting students. Commuting students select from the same courses, have access to on-campus facilities, and can participate in extracurricular activities. In addition, for students who are unable make it to campus, we offer select online courses.



Make Friends From Around the World

"The people in my dorm feel like family. I've gotten to know so many interesting, amazing, and talented people from all across the globe."



Come to Our School.

Stanford Online High School



Stanford Online High School (OHS) creates a worldwide learning community of diverse, intellectually passionate students and teachers. Through vibrant seminars, the rigorous curriculum challenges students in grades 7–12 to reason analytically, think creatively, and argue persuasively.



Expect the Extraordinary

Beyond the classroom, collaborative extracurricular activities cultivate lasting relationships among students and teachers. The school's supportive environment fosters independence, strength of character, and a lifelong pursuit of knowledge.

“The quality of instruction, engaging class environment, rigorous curriculum, enriching social activities, and creative approach make Stanford OHS a truly peerless school.”

—Christine (Class of 2019)





Grades **7-12**



An Independent School
WASC Accredited

2006
Year Founded





Our Classroom

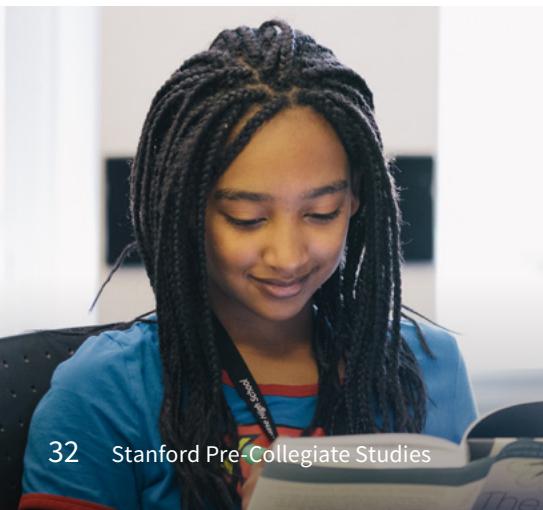
Real-Time, Online

“Contrary to the typical online school stereotype, the seminar-style, live discussions are immersively interactive, as a huge emphasis is placed on student participation and engagement.”

— Ally (Class of 2018)

Academics

- ✓ Online, real-time, seminar classes bring together students and instructors for highly engaging discussions
- ✓ College-style course schedule meets the needs of students everywhere and fosters time-management skills
- ✓ 65% of instructors hold Ph.D. degrees in their fields, and work closely with students in and outside of class
- ✓ Full-time, part-time, and single course enrollment options meet each student's goals
- ✓ 25 Post-AP and University-Level courses and 16 AP Courses—with 80% of students receiving a score of 4 or 5 in the 2016-17 academic year
- ✓ 8–10 weekly hours of work per class (including class time)



Community

Beyond academics, students engage in a rich array of extracurricular student-run clubs (including Art Club, Chemistry Club, Entrepreneurs Club, Ethics Bowl, Film Club, Gay Straight Alliance, Robotics Club, Student Service Board, and more), homeroom, and assemblies. An optional two-week intensive residential summer program on Stanford's campus offers students further opportunities to connect with each other and their instructors.

Our community support is augmented by counseling, academic advising, writing labs, and college counseling. Students thrive in this supportive, engaging environment and receive individualized attention.

"Although students are separated by space and time, I have developed unique bonds with fellow classmates and friends that I have met through clubs and assemblies, at Summer @ Stanford, or at local meetups."

-Luke (Class of 2017)



Global Perspectives *An Instructor's View*

"I love the way Stanford OHS brings together students living such different everyday lives into the same classroom at the same time, to learn from each other and form lasting bonds."

—Meg Lamont, Ph.D.



About Stanford OHS



65%
of instructors
hold Ph.D.'s

15% 1
of students receive
financial assistance



Average
Class Size **12**

Enrollment Breakdown



48% Full-Time
4-5 Courses



14% Part-Time
2-3 Courses



38% Single Course
1 Course

Programs-at-a-Glance

Which program is right for you?

Use our online program finder at:

spcs.stanford.edu/programs

	Elementary 1 - 5	Middle School 6 - 7	High School 8 - 9	High School 10 - 12	Summer	Academic Year	Number of Weeks	Global Student Body	Local Student Body	High School Credit	College Credit	Cont. Studies Credit	Certificate/No-Credit	Residential	Commuter	Online
Stanford Pre-Collegiate Summer Institutes		✓	✓	✓			3	✓				✓	✓			
Stanford Summer Humanities Institute			✓	✓			3	✓				✓	✓			
Stanford Summer Arts Institute		✓	✓	✓			3	✓				✓	✓			
Stanford University Mathematics Camp (SUMaC)				✓	✓		4	✓				✓	✓			
Stanford Medical Youth Science Program (SMYSP)			✓	✓			5		✓			✓	✓			
Stanford Artificial Intelligence Program (SAILORS)			✓		✓		3	✓				✓	✓			
Stanford Sports Business Academy*			✓	✓			2	✓				✓	✓			
Stanford Math Circle	✓	✓	✓	✓		✓			✓			✓		✓		
Stanford Science Circle	✓	✓	✓			✓			✓			✓		✓		
Stanford Humanities Circle	✓	✓	✓			✓			✓			✓		✓		
Stanford University-Level Online Math & Physics			✓	✓	✓	✓		✓			✓					✓
Discovering Medicine @ Stanford				✓	✓			✓				✓		✓		
Stanford Pre-Collegiate International Institutes		✓	✓	✓			2	✓				✓	✓			
Stanford Honors Academies	✓	✓	✓	✓			2	✓				✓		✓		
Stanford Summer Session			✓	✓			8	✓			✓		✓	✓	✓	✓
Stanford Online High School	✓	✓	✓			✓		✓		✓						✓

*Stanford Sports Business Academy is for U.S. students only.

Apply Today!

Admission for most Stanford Pre-Collegiate Studies programs is competitive.*
Each program has different application requirements and deadlines.
Test scores are required for some but not all programs. Please refer to
program websites for more detailed information.

We Want to Hear From You

Stanford Pre-Collegiate Studies

✉ precollegeate@stanford.edu

Summer Residential Enrichment Programs

✉ precollegeate@stanford.edu

📞 650-721-9325

↗ summerinstitutes.stanford.edu

↗ summerhumanities.stanford.edu

↗ summerartsinstitute.stanford.edu

↗ sumac.stanford.edu

↗ smysp.stanford.edu

↗ sailors.stanford.edu

↗ sportsbusinessacademy.stanford.edu

Enrichment Circles

✉ precollegeate@stanford.edu

📞 650-721-2947

↗ mathcircle.stanford.edu

↗ sciencecircle.stanford.edu

↗ summerhumanities.stanford.edu/
humanities-circle

University-Level Online Math & Physics

↗ ulo.stanford.edu

Discovering Medicine @ Stanford

✉ precollegeate@stanford.edu

📞 650-721-2947

↗ dmats.stanford.edu

International Collaborations

✉ internationalinstitutes@stanford.edu

📞 650-721-2947

↗ internationalinstitutes.stanford.edu

↗ internationalinstitutes.stanford.edu/
honors-academies

Stanford Summer Session

✉ summersession@stanford.edu

📞 650-497-7290

↗ summer.stanford.edu

Stanford Online High School

✉ ohsadmissions@stanford.edu

📞 650-721-9422

↗ ohs.stanford.edu

Office of Science Outreach (↗ oso.stanford.edu)

The Office of Science Outreach (OSO) encourages and assists Stanford faculty and students to engage in science outreach on and off campus. Families can check the website for a comprehensive listing of K-12 science and engineering programs at Stanford.

*Math Circle and Science Circle are filled via lottery. Space is limited.

Stanford University

Stanford Pre-Collegiate Studies
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Stanford, CA 94305-4101

Connect with Us

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-  [stanford.precollegiate](https://www.facebook.com/stanford.precollegiate)