With more than 750 mathematics and science credentials awarded in 2019-20 alone, California State University educates more teachers in the state than any other institutions combined. In fact, it prepares nearly half the new teachers in California every year. However, a recent study by the Learning Policy Institute shows that California will need an additional 33,000 teachers to help close equity gaps in mathematics and science over the next decade.

The California State University is committed to student success, which means partnering with its colleagues from PK-12 and community colleges to ensure students are prepared not only to enter, but remain, at a CSU campus and earn a CSU degree. Teacher preparation is key. The CSU continues to grow California’s diverse and talented teaching force, with special investment in mathematics, science and quantitative reasoning.

MEETING CALIFORNIA’S NEEDS

The CSU is investing in a variety of partnerships and initiatives to help increase the number of teachers prepared to succeed in mathematics and science classrooms. These efforts include:

Mathematics and Science Teacher Initiative
The CSU has committed to increase its annual production of credentialed teachers in mathematics and science by investing an additional $10 million for four years in its Mathematics and Science Teacher Initiative (MSTI).

Quantitative Reasoning Course Development
CSU campuses are supporting PK-12 educators, especially in high-need areas, in developing and teaching 12th grade classes in quantitative reasoning. The project offers curriculum design and professional training to equip teachers to offer a broader range of coursework to prepare students for college success.

CSU Mathematics Teacher Education Partnership (CSU-MTEP)
This community of CSU faculty and PK-12 educators explores strategies for preparing, recruiting and retaining high school teachers who are proficient in the Common Core State Standards in Mathematics (CCSS-M.)
Advancing the Next Generation Science Standards (NGSS)
A partnership with Chevron has enabled the CSU to be a national leader in preparing teachers for the Next Generation Science Standards (NGSS) by providing hands-on kits, online teacher preparation courses, paid summer internships, makerspaces and laboratories.

Supplementary Authorization in Computer Science
This CSU program allows teachers to earn Supplementary Authorization in Computer Science, Introductory or Specific, and add it to his or her teaching credential to teach K-12 computer science courses.

Diversifying Our Educator Workforce
Students of all backgrounds excel when they are taught by diverse teachers. The CSU places a high priority on advancing diversity and equipping teachers with the skills and experiences to deliver high quality, culturally responsive instruction that helps all students learn and grow.

The following demographic information, as of fall 2020, reflects 961 CSU teacher candidates pursuing a science or mathematics credential.

- 50% are first in their family to earn a bachelor’s degree
- 35% Hispanic/Latino
- 34% White/Non-Latino
- 17% Asian American
- 5% Unknown
- 4% Two or More Races
- 3% African American
- 3% Non-Resident

To ensure that all California students have the access and opportunity to earn a high-quality degree that prepares them for their future, the California State University has proposed expanding its “a-g” admission requirements to include one additional course in quantitative reasoning in high school. This level of academic preparation is essential for success in college, the workforce and in life. It is also key to closing racial and gender disparities, especially in the high-demand, high-paying STEM fields.

The CSU Board of Trustees, working in collaboration with a steering committee of internal and external stakeholders, is considering next steps. The proposed requirement would be applicable for fall 2027.

For More Information
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