The existing “a-g” requirements that determine minimum eligibility for admission to the California State University (CSU) have remained unchanged for more than 20 years. Yet, the preparation needed to be successful in college, the workforce and virtually every aspect of life has changed. This is particularly true for high-demand, high-paying STEM careers, where racial and gender disparities persist.

To ensure that all California students have the opportunity to earn a high-value degree that prepares them for their future, the CSU is expanding its “a-g” requirements. This change requires the completion of one additional course in quantitative reasoning in high school. The CSU Board of Trustees, working in collaboration with a steering committee of internal and external stakeholders, is enacting a series of steps to help prepare for this new requirement proposed for fall 2027.

**QUANTITATIVE REASONING PREPARATION SUPPORTS STUDENT SUCCESS**

National research and CSU data are clear: students – from all backgrounds and pursuing all majors – are more likely to remain enrolled in college and earn a degree in four years if they have taken an additional course in quantitative reasoning in high school.

### First-Year Retention CSU Fall 2018 First-Time Students

<table>
<thead>
<tr>
<th></th>
<th>African American</th>
<th>Latinx</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfilled</td>
<td>67%</td>
<td>74%</td>
<td>81%</td>
</tr>
<tr>
<td>Existing</td>
<td></td>
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</tbody>
</table>

### Four-Year Graduation Rate CSU Fall 2015 First-Time Students

<table>
<thead>
<tr>
<th></th>
<th>African American</th>
<th>Latinx</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfilled</td>
<td>8%</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>Existing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Fulfilled Only Existing “a-g” Requirements | Additional Year of Quantitative Reasoning (area “c” or “d”)
---|---

Outcomes for California high school students enrolled as first-time full-time CSU students. Students meeting the requirement with an elective are included in the black bars due to data collection limitations. San Diego State data are not included in the second chart due to limited data prior to 2017.

**MULTIPLE PATHWAYS FOR STUDENTS TO FULFILL THE REQUIREMENT**

High school students will have the flexibility to take courses that reflect their interests or desired field of study, while also meeting CSU admission requirements. The quantitative reasoning requirement could be fulfilled through the following:

- Elective course with a quantitative reasoning foundation
- Traditional mathematics course (beyond Algebra II or Integrated Mathematics III)
- An additional science course (beyond required two years)
- Select Career and Technical Education courses
- Dual enrollment in partnership with a community college
- Online course (where offered)

**Examples of Qualifying Elective Courses**

- Coding
- Economics
- Forensics
- Personal Finance
- Sports Medicine
- Computer Science
- Engineering
- Green Technology
- Robotics
- Veterinary Science

Revised October 2020
BUILDING UPON EXISTING QUANTITATIVE REASONING COURSE OPTIONS

If the quantitative reasoning admission requirement were in effect today, the vast majority of California students could meet the requirement through their existing course-taking behavior and the courses available at their high school.

- In fall 2018, 94% of regularly admitted incoming first-year CSU students from California public high schools would have fulfilled the proposed requirement.

- Of the 1,435 high schools in California, only 16 offer fewer than three qualifying courses. These are predominately small charter schools.

- Examining the data, the CSU has identified 29 school districts where students’ course-taking behavior and course availability need to be closely examined. These districts will receive the initial wave of implementation support.

AN EXEMPTION WILL BE OFFERED TO STUDENTS WHO ARE UNABLE TO ACCESS A QUALIFYING COURSE

Come 2027, any student who is eligible for the CSU but who cannot fulfill the new requirement due to a lack of resources and/or course availability at their high school will be provided an exemption. The CSU intends to partner with the University of California and the California Department of Education to automate the exemption for students from schools with limited qualifying course offerings, reducing the burden on students to seek out the exemption.

IMPLEMENTATION PARTNERSHIP AND INVESTMENT

The CSU continues to support K-12 school districts with building teaching capacity and will support efforts to communicate with students and families regarding this requirement change prior to the 2027 implementation. The CSU will:

- Support the adoption of “bridge” courses, which currently exist in more than 160 California high schools through various CSU bridge courses

- Offer professional development and in-service opportunities for K-12 teachers and administrators

- Leverage the existing success of the CSU’s colleges and schools of education to grow the teacher workforce

- Invest an additional $10 million in the CSU’s Mathematics and Science Teacher Initiative to recruit and prepare K-12 teachers in STEM fields

- Prepare K-12 educators, families and prospective students for the admission change through a communications campaign

- Communicate directly to high school counselors regarding the quantitative reasoning requirement